

ST FORMAT

SIMPLY THE BEST!

The very best ST software ever! The programs, their potential and why you need their power
It's an 8 page gold mine!

9 CHAMPION PROGRAMS!

SEE BACK COVER FOR FULL DISK DETAILS



THIS MONTH'S TOP REVIEWS:

Protext 6.5, 200 fonts, That's Write 3, Papyrus Gold, SpeedoGDOS v.5, Premier Manager 2, Spherical and more!

TAKE CONTROL

How languages can give your programs real power

CREATE YOUR OWN GAMES

We review the top games creators and show you how best to use them



OVER
260
ESSENTIAL
ATARI PROGRAMS
RATED!



THE DEFINITIVE STF GUIDE TO:

- GRAPHICS
- MUSIC
- GAMES
- CODING
- DTP
- COMMS
- SPREADSHEETS
- WORD PROCESSORS
- PUBLIC DOMAIN
- DATABASES
- EDUCATION
- THE LOT!!!



**525Mb
£599**

**ALL NEW GASTEINER
Hard Drive for Atari ST,
STFM, STE, MEGA ST,
MEGA STE & the
formidable FALCON
030.**



Award winner for BEST
HARDWARE 1993 - ST
Review

The All NEW
GASTEINER Hard Drive
has all the following
features:

- 1, Auto Booting and Auto Parking
- 2, Front On/Off switch
- 3, Power indicator (LED) light
- 4, SCSI icon selector switch
- 5, Sleeve bearing Fan (17CFM)
- 6, Dual SCSI Port
- 7, Internal 5% Tolerance P.S.U. (90-260 VAC)
- 8, Top Quality Formatting and Partitioning Software
- 9, New Compact Case (4.00x4.64x9.00) (HxWxD)
- 10, 12 Months back to base guarantee

GASTEINER HARD DRIVES

	TT/FALCON	STE/STFM
GHD 40Mb	P.O.A.	P.O.A.
GHD 120Mb	£229.00	£279.00
GHD 170Mb	£259.00	£299.00
GHD 270Mb	£349.00	£379.00
GHD 340Mb	£399.00	£449.00
GHD 540Mb	£599.00	£649.00
GHD 1080Mb	£899.00	£949.00
GHD 1800Mb	£1299.00	£1349.00

(1) EXPERIENCE

With over 20 man years experience in the Atari Computer market. Servicing many happy customers (over 10,000) we are the foremost manufacturers of Atari Hard Drives.

(2) DESIGN

Using the latest C.A.D. Technology we consider Power Supply design, Air Flow characteristics and Drive Specifications, combined with innovative manufacturing processes, ensure that we can produce the most reliable products to the highest standards.

(3) TESTING

Following the initial design process all our products are subjected to an in-depth testing procedure including mechanical and electrical tests while thermal Trials ensure the reliability of any configuration in every possible environment.

NEW



NEW 200 DPI MOUSE. Small and compact for all Atari ST range systems.

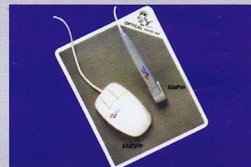
£6.99

ALFA DATA SCANNERS

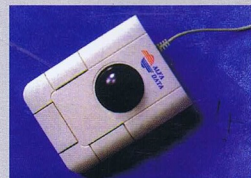


Alfa Scan Plus.....£119.00
Alfa Scan OCR.....£139.00
System requirements 2Mb RAM + Hard Drive
Mono Scanner for Falcon.....£99.00
Colour Scanner for Falcon.....£399.00

MICE+TRACKBALLS



- Pure Optical Design with High Resolution
 - Light, accurate, easy to use and long life
 - With tough pure optical mouse pad
- Alfa Pen.....£34.95
Alfa Optic.....£29.95



- Two colour illuminating crystal ball (TKB MT AC ONLY).
 - Ergonomic Design for very comfortable operation.
 - Top quality construction with micro switch buttons.
- Standard Trackball.....£29.95
Crystal Trackball.....£34.95

Repair service

New service/centre for most Amiga computers. We offer a quotation service of £10 for which we will examine your computer and report back with an exact quotation price for the repair. If the repair is carried out the £10 is then deducted from your bill.

How to order

When ordering by telephone please quote your credit card number followed by the expiry date and also your full name and address. If paying by cheque please make it payable to Gasteiner Technology. In any correspondence please quote a phone number and also a postal code, please allow five working days for cheque clearance.

Delivery charges

Small consumables and software items under the value of £59 please add £3.50 P&P. Other items except lasers, next day courier service £10 per box. Offshore and highlands, please call for a quotation. In addition, we offer the following express services: Saturday delivery normal rate plus £15 per box. Morning, next day normal rate plus £10 per box. E&OE prices subject to change without prior notice. All trademarks acknowledged.

ATARI COMPUTERS



Atari 1040STE 1Mb.....	P.O.A.
Atari 1040STE 2Mb.....	P.O.A.
Atari 1040STE 4Mb.....	P.O.A.
Atari 1040STE 12Mb.....	P.O.A.
Atari 520STFM 1Mb.....	P.O.A.

FALCON 030 COMPUTERS



Falcon 030 1Mb.....	P.O.A.
Falcon 030 4Mb.....	P.O.A.
Falcon 030 4Mb + 85Mb HD.....	P.O.A.
Falcon 030 14Mb + 85Mb HD.....	P.O.A.
Falcon 030 4Mb + 120Mb HD.....	P.O.A.
Falcon 030 14Mb + 120Mb HD.....	P.O.A.
Falcon 030 4Mb + 210Mb HD.....	P.O.A.
Falcon 030 14Mb + 210Mb HD.....	P.O.A.

FPU for all the above Falcons

- Please call



Emagic Notator SL.....	£279.00
Emagic Creator.....	£179.00
Emagic Unitor II.....	£230.00
Cubase.....	£150.00
Cubase Version 3.....	£319.00
Cubase Light.....	£70.00
Notator Alpha.....	£170.00
Cubase Audio.....	P.O.A.
Steinberg Pro 24 III.....	£49.95
Musicom.....	£43.95

FORGET-ME-CLOCK II

CLOCK CARTRIDGE FOR
ST-STE-FALCON

Clock with Thruport.....	P.O.A.
Clock no Thruport.....	£11.95

ATARI MEMORY UPGRADES

INCREASE YOUR MEMORY
ST-STF-STFM-MEGA ST +
FALCON

Xtra-Ram Board 0Mb.....	£24.95
512K to 1Mb.....	£32.95
2Mb.....	£75.00
4Mb.....	£125.00
8Mb.....	P.O.A.
14Mb Falcon.....	£599.00
4Mb Falcon.....	£149.00
1Mb Falcon.....	£49.00
Virtual Memory.....	£49.00

INCREASE YOUR MEMORY
FOR ATARI STE
COMPUTERS ONLY

1Mb.....	£4.95
2Mb.....	£50.00
4Mb.....	£100
8Mb.....	P.O.A.

FALCON INTERNAL HARD DRIVE

HIGH QUALITY INTERNAL
2.5" IDE HARD DRIVES FOR
THE FALCON, INCLUDING
MOUNTING BRACKET AND
IDE CABLE

65Mb.....	£139.00
85Mb.....	£149.00
120Mb.....	£199.00
170Mb.....	£239.00
209Mb.....	£299.00
350Mb.....	£349.00
Bracket for Hard Drive.....	£15.00
IDE Cable.....	£15.00

Falcon Eagle Sonic 32
(32MHz) Accelerator for
Atari Falcon 030£199.00

FALCON 030 EXTRAS

SCSI II Cables.....	£34.95
ST Monitor Cable.....	£15.00
SVGA Monitor Cable.....	£15.00
Truepaint.....	£33.95
Midi Cable.....	£12.95
Stereo Speakers.....	£29.95
Stereo Headphones.....	£16.95
400DPI Mouse.....	£19.95
Dust Cover.....	£9.95

SCSI BARE HARD DRIVES

40Mb.....	£99.00
85Mb.....	£179.00
127Mb.....	£199.00
170Mb.....	£219.00
240Mb.....	£249.00
540Mb.....	£399.00
1.0 Gig.....	£799.00

SOFTWARE

HI-SOFT PRODUCTS

THE CODERS MULTIPACK (Programming)

Power Basic.....	£79.95 Normally £124.00
Basic II.....	
Tempus II.....	
Devpac 2.....	

THE HOME OFFICE MULTIPACK (Business Applications)

K-Spread 2.....	£79.95 Normally £169.00
Harlekin 2.....	
K-Graph 3.....	
Personal Finance Mngtr Plus.....	

THE MEDIA MULTIPACK (Video/Music)

Video Master.....	£129 Normally £229.00
Colour Master.....	
Replay Stereo.....	
Concerto.....	

THE DISK MULTIPACK (Utilities)

Diamond Edge.....	£99.95 Normally £144.00
Knife ST.....	
Diamond Back 2.....	
Datalite 2.....	

NEW PRODUCTS

Papyrus.....	£127.00
True Image.....	£27.95

WORD PROCESSORS

Word Writer.....	£45.00
1st Word Plus v3.2.....	£39.95

DTP SOFTWARE

Calamus 1.09.....	£95.00
Pagestream v2.2.....	£169.00
Timeworks Publisher.....	£39.95
Calamus SL.....	£199.00
O.C.R. Software.....	£49.95
Touch-up Upgrade.....	£27.95
Easdraw Supercharged.....	£15.00
Cyber Studio.....	£10.00
Cyber Control.....	£5.00
Cyber Paint.....	£5.00
ST-Basic.....	£3.00
Human Design Disk.....	£9.00
Future Design Disk.....	£9.00
Signs + Banners.....	£15.00
Calendar + Stationery.....	£15.00
Art Library.....	£15.00
Easy Tools.....	£10.00
That's Fun Face.....	£10.00
Family Curriculum Software.....	£29.95

BITS AND PIECES

Internal Power Supply for Atari ST, STF, STFM, STE.....	£32.95
Internal Disk Drive.....	£45.00
Keyboard.....	£69.00
STE Motherboard.....	P.O.A.
TOS 2.06 STE.....	P.O.A.
Outer Casing STE, STFM.....	£20.00

ACCESSORIES

Twin Joystick Ext. Cable.....	£3.50
Mono Colour Switchbox.....	£14.95
Multisync Switchbox.....	£29.95
Printer Cable.....	£6.00
Modem Cable.....	£6.00
Null Modem Cable.....	£6.00
Serial Cable.....	£6.00
Philips/Atari Cable.....	£10.00
Scart Cable.....	£10.00
3.5" External Disk Drive.....	£50.00
Blitz Turbo.....	£25.00
Power Cable.....	£6.00
Mouse Mat (picture).....	£5.00
Box 10 Disks.....	£4.00
Dust Covers (all sorts).....	£6.00
DMA Cable.....	£6.00
SCSI Cable.....	£6.00
Centronics to Centronics.....	£10.00
Optical Mouse Mat.....	£10.00
ST-TV Cable.....	£10.00
Printer Switchbox.....	£9.95
Auto Printer Switchbox.....	£14.95
Disk Box (80 capacity).....	£6.95
Disk Box (100 capacity).....	£9.95

AUTOMOUSE- JOYSTICK SWITCH

Allows you to instantly select either your mouse or joystick by a simple click on your mouse. You won't need to fumble around under or behind your computer to swap your mouse and joystick cable ever again, and also it saves your joystick port.

£9.95

BUILD YOUR OWN HARD DRIVE FOR ATARI COMPUTERS

Casing.....	£35.00
45 Watt P.S.U.....	£35.00
SCSI Cable.....	£6.00
DMA Cable.....	£6.00
Power Cable.....	£6.00
SCSI to Centronics Cable.....	£18.00
G.E. Soft Host Adaptor.....	£59.95
SCSI II Cable for Falcon.....	£34.95
Top Link Controller.....	£75.00

MONITORS

Gasteiner GM148 with Sound.....	£129.00
Microvitec 1440 Multisync.....	£389.00
Commodore 1084 SC Colour.....	£199.00
SVGA Mono for Falcon.....	£120.00

Official purchase orders welcome from Educational establishments and major corporates. (Strictly 14 days net). Please phone for approval.

All prices include VAT. Prices and specifications subject to change without notice. E&OE.

All goods under £50 please add £3.50 p&p and all goods above £50 please add £10 Courier Service. Next day service please call.

126 Fore Street, Upper Edmonton, London N18 2AX

Major credit cards accepted



Pure Gold

*Simply the best ST software ever!
The complete guide to the greatest
ST programs ever written. Join the
awards frenzy on page 20.*

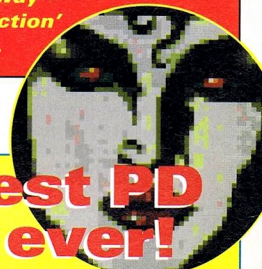


Start making sense

*Our no-nonsense guide to learning a
programming language, on page 14!*

Nearly all my own work

*Write games the easy way –
cheat! 'Which Construction'
kit' begins on page 80.*

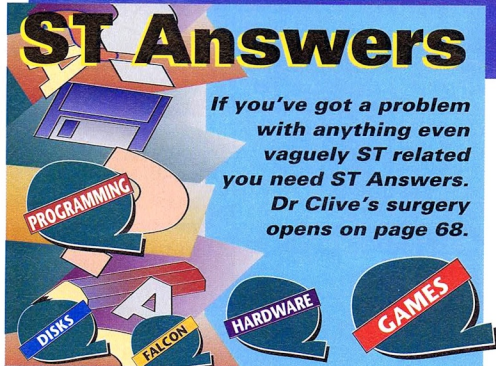


The best PD game ever!

*Discover the program that redefines
the boundaries of shareware. Catch
your first glimpse of the stunning
Starball on page 64.*

ST Answers

*If you've got a problem
with anything even
vaguely ST related
you need ST Answers.
Dr Clive's surgery
opens on page 68.*



COVER DISK 63

**9 TOP
PROGRAMS
ON DISK**



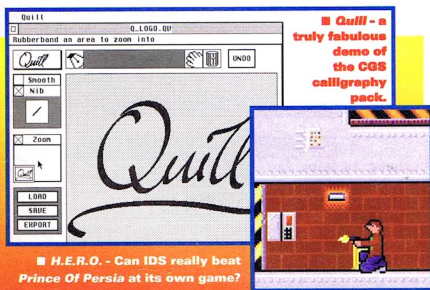
TURN TO PAGE 6 FOR

TENTS

THIS MONTH'S REVIEWS

More reviews, more facts and more bite than any other ST magazine.

- 30 THAT'S WRITE 3**
Let the battle commence! The war of words gets serious.
- 32 TRUEIMAGE**
The successor to True Paint is here - but is it better?
- 34 FAMILY ROOTS 2**
Genealogy made genial or a family feud?
- 36 PROTEXT 6.5**
It's fast, it's powerful, it's *Protext* 6.5, it's reviewed.
- 38 SPEEDOGDOS V5**
Fantastic or a flight of fantasy?
- 40 FONT PACKAGES: OFFICE/GOLD**
100 typefaces for £50! Does that look good or what?
- 41 CLARITY FALCON V2**
It's back! And this time it's had its bugs fixed - or has it?
- 42 EDITH**
You've met the aunty, now meet the text editor!
- 43 STORM TRACKER**
Another contender for the ST soundtracking crown.
- 44 STEREO CAD**
Make dots make sense - it's a stereogram creator!
- 46 PAPYRUS GOLD**
Document processors - the next generation.
- 48 GEMULATOR**
Now PC owners can finally join in the ST fun.
- 58 PREMIER MANAGER 2**
Heavyweight footie stats and big league fun!
- 60 SPHERICAL**
Silly sphere fun direct from Holland.
- 64 STARBALL**
A PD game that's so good it demanded a page of its own.



■ **Quill** - a truly fabulous demo of the CGS calligraphy pack.

A FULL COVER DISK GUIDE

ST FORMAT ■ ISSUE 63 ■ OCTOBER 1994

FEATURES

- 14 START MAKING SENSE**
Cultivate your coding by learning a language! Learning C+ or Pascal could make your coding easier and far more effective - but which one should you choose?
- 20 PURE GOLD**
Every *FORMAT* Gold ever! An in-depth investigation of the finest ST programs - why they're so special, their power, their potential and what they can do for you!
- 74 PAPYRUS GOLD MASTERCLASS**
HiSoft's new document processor is so pokey that all the instructions won't fit in one manual. Cue Nick Peers and a fistful of tips on how to milk the most power from this instant classic.
- 80 (NEARLY) ALL MY OWN WORK**
Want to write a game but can't code? Then you want a construction kit, mate! Get the full spec on the packs that make life easier for the fledgling game author.



Write games the easy way! If you want to program but can't code see page 80. It's so easy!

REGULARS

- 6 COVER DISK**
The essential guide to this month's fabulous Cover Disk. All the instructions, tips and info you can eat.
- 10 NEWS**
Atari to attend the Future Entertainment Show, CGS release *DA's Layout*, new ST shows announced...
- 29 REVIEWS INTRO**
Your quickest start guide to the *STF* reviews and exactly what those scores mean.
- 50 PUBLIC SECTOR**
The very latest ST public domain is put to the test. How good can free software get?
- 54 INDIES CORNER**
SpriteFX goes under the spotlight. Can it really make generating sprites a pleasure?
- 57 PREVIEW: RUGBY LEAGUE MANAGER**
REAL rugby gets the management sim treatment from Audiogenic - and it looks brilliant!
- 66 SUBSCRIBE**
Save £1 an issue, avoid masses of hassle and get a free binder into the bargain. Subscribe now!
- 68 ST ANSWERS**
Clive Parker and co answer all your technical ST questions. Essential reading for serious ST fans.
- 76 NEW FEATURE: READER ADS**
Your chance to book a space in the one time that every ST user sees. Buy, sell, swap and notify, all for free!
- 77 GAMEBUSTERS**
Tips! You want tips? Then Gamebusters is your man. This Month Rock 'n' Roll Clams gets busted big-style.



- 85 BACK ISSUES**
Missed an *ST FORMAT*? Want to get hold of an old Cover Disk? Get a back issue bargain!
- 86 FEEDBACK**
Riveting writing - by you. Top-notch debates, diatribes and discussions. Okayish answers too!
- 89 READER OFFERS**
The very best ST kit, chosen by the *STF* team at major low prices. Consume!
- 90 TWILIGHT ZONE**
The last soft page of the issue, so make the most of it before handling those oh-so-stiff covers. (What! - Trent)

Production control asst Suzannah Angelo-Sparling
Lino and scanning Simon Chittenden; Mark Glover,
Nick Harvey, Jon Moore, Chris Stocker,
Simon Windsor, Jason Tiley
Printed in the UK by Garnett Dickinson Print Ltd,
Rotherham
Publisher Simon Stansfield
Group Publisher Steve Carey
Managing Director Greg Ingham
Circulation Manager Jon Bickley (T 0225 442244)

COPYRIGHT NOTICE
STF recognises all copyrights in this issue. Where possible we have acknowledged the copyright holder. Please contact us if we have failed to credit your copyright - we'll be happy to correct oversights.
■ We assume all letters sent are for publication unless otherwise stated and *STF* reserves the right to edit contributions.
■ If you contribute, full copyright comes to Future Publishing.
■ We cannot reply to all letters personally, even if you include an SAE.
■ © 1994 Future Publishing.
■ No part of *STF* may be reproduced or resold without the permission of our publisher.
■ *STF* cannot be held responsible for any mistakes/misprints.

Your guarantee of value

Future Publishing
ST FORMAT ■ Amiga Format ■ PC Format
■ Amiga Power ■ Sega Power ■ PC Plus
■ GamesMaster ■ Commodore Format
■ Super Play ■ Amstrad Action
■ Edge ■ Amiga Shopper ■ Total
■ PC Gamer ■ PC Answers ■ MacFormat

This magazine comes from Future Publishing, a company founded just eight years ago but now selling more computer magazines than any other publisher in Britain. We offer:
BETTER ADVICE. Our sites are packed with tips, suggestions and explanatory features, written by the very best in the business.

STRONGER REVIEWS. We have a cast-iron policy of editorial independence and our reviews give clear recommendations.
CLEARER DESIGN. You need solid information fast. So our designers highlight key elements by using charts, diagrams, summary boxes, annotated photographs, and so on...
GREAT RELEVANCE. At Future, Editors operate under two golden rules:
■ Understand your readers' needs. ■ Satisfy them.
MORE READER INTERACTION. We draw on readers' contributions, resulting in the liveliest letters pages and the best reader tips. Buying one of our magazines is the joining a nationwide user group. More pages, more intelligent stuff, better quality - magazines you can trust.

COVER DISK



MONTHLY MENU

Quill

Our exclusive demo of this excellent vector graphics package from CGS Computerbild.

Uncompressed size: 296K

H.E.R.O.

Another exclusive demo of this colourful, brilliant, absorbing new game from IDS.

Size: 205K

Herman

A superb new shareware game which runs on any ST.

Size: 126K

Dynamic Address Database

Keep tabs on friends and relatives with this excellent utility.

Uncompressed size: 153K

QPlay 3

Play your Quartet sound creations with this excellent player.

Uncompressed size: 68K

Tetris

Play the frustratingly addictive Tetris from within any GEM program using this Accessory version.

Size: 11K

Auto RezSwitch

Switch between low and medium resolutions with a keypress when you boot up your ST.

Size: 7K

STE Medium Resolution Booter

Enables STEs with TOS 1.6 to boot in medium resolution.

Size: 2K



Menu

Decompress and copy the programs with our new menu program.

Size: 10K

Cover Disk Backup

Back up your Cover Disk and other important disks safely and quickly.

QUILL

By: CGS Computerbild
Machines: All STs, TTs, Falcons
Memory Needed: 512K
Resolution: Medium/High
Uncompressed size: 296K

Quill is best described as a vector graphic sketching and tracing program, and received an excellent 84% when it was reviewed back in STF 59 (see page 83 to order your copy if you missed it). In this exclusive demo from CGS, you can do everything the full package offers, except save and export your pictures, enabling you to get a good feel of how the program works.

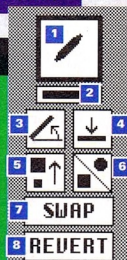
Once you've transferred the program using the Menu program, open the Quill folder and double-click on QUILL.PRGM to get started. Once the program has loaded you'll notice that the main work area is

THE NIB MENU

Left mouse button selects functions, right exits.

Moving the mouse up and down within each alters its parameters.

- 1 Clicking here exits back to the main menu.
- 2 Click on here to alter the nib's shading.
- 3 Click here to rotate the nib on its x-axis.
- 4 Alternatively, the z-axis can be rotated from here.
- 5 Click here to resize the nib.
- 6 Click here to alter the nib's shape.
- 7 Swap undoes the last action.
- 8 Undoes all of the alterations made inside the nib menu.



shaded grey rather than white – another feature of the demo.

Try loading some of the example files to see what the program is capable of. These are contained in the three folders marked CALLIGR, CARTOON and TRACING

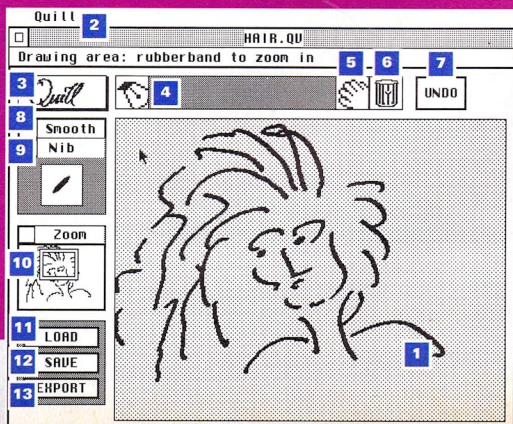
respectively. Quill is easy to get into – see the box below which explains how the icons work, or read QUILLDEM.TXT for a brief guide to all the functions. Whatever the case, you can be up and running within seconds of loading.

GETTING TO GRIPS WITH QUILL

Quill is incredibly easy to use. You draw your image, then select how you would like it to look in terms of its nib size, shape and orientation. Use the quick guide below and you can be up and doodling in minutes, even seconds.

- 1 The main work area where you create your sketches with the mouse (hold down the left button to actually draw).
- 2 Quit from Quill.
- 3 Click here for info on Quill.
- 4 Click here to start drawing with the currently selected nib (see below).

- 5 Click here to start cutting and pasting individual pen strokes. Select each by drawing the rubberband around any part of the stroke. This cuts it, and it can then be moved by the mouse to be pasted elsewhere.
- 6 Deletes pen strokes (which were selected in the same way as for cutting and pasting).
- 7 Click here to undo the last change to your sketch.





USING THE STF MENU PROGRAM

Now we've made it really easy for you to copy and extract programs from our Cover Disk and Wonder Disk, whether it be to floppy or hard disk. Just follow the ten steps below and make sure you have some blank formatted disks ready.

We've assumed a double-sided, single-drive system in medium resolution for these instructions. If your ST is in low resolution then switch to medium resolution using the Preferences command in the Options menu at the Desktop.

- 1 Place the Cover Disk (or Wonder Disk) in the drive and double-click on the STF_63.PRQ icon (or the STF_W63.PRQ icon on the Wonder Disk). Wait for the STF FORMAT logo to appear and press any key.

- 2 Once the menu screen appears, with instructions at the top of the screen and a list of programs in the centre, check the text at the top of the screen for any special instructions.

- 3 Use the up and down arrow keys on the cursor keypad to select the program you require, and press the <Return> key.

- 4 After a few seconds a message appears asking you to select the destination disk for the program. Press any key and wait for the file selector to appear.

- 5 When the file selector appears select Drive B as the destination, even if you only have a single disk-drive. If you own an STFM with TOS 1.2 you should select the command line by clicking on it with the mouse, and replacing 'A:' with 'B:'. Do not press <Return> or click on OK at this point - click on the Close Box icon in the file selector instead.

An alert box will now appear, asking you to put Disk B into Drive A. Do so, and then click on OK. When the alert box has vanished, click on the OK button in the file selector.

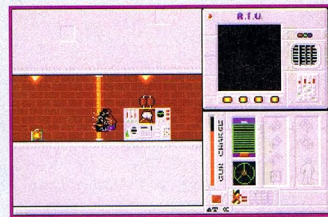
- 6 The alert box now asks you to put Disk A into Drive A. Do so and click on the OK button. After the box vanishes press any key and the menu program loads the program you have selected into memory. An alert box tells you to put Disk B in Drive A. Do so and click on OK.

- 7 The program is copied to your blank disk and automatically makes any folders it may need. If the file is compressed then the menu program automatically unpacks it, then deletes the compressed file.

- 8 Some compressed files may be contained in more than one segment. Follow the on-screen instructions and keep swapping disks when requested.

- 9 You finally come to a message telling you that the program has been transferred. Press any key to return to the main Cover Disk menu.

- 10 When you have returned to the Cover Disk menu you can select another program to decompress or press the <Esc> key to return to the Desktop.

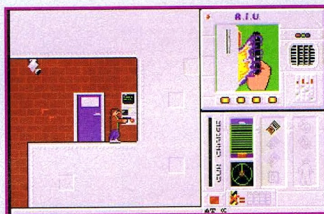


■ Government Health Warning #636: don't run into electric fields. They tend to kill you.

trapped human being. As you can see, *H.E.R.O.* is a platform game along similar lines to *Prince of Persia*, with equally nice animation (just note your character's little quirks, and the different number of ways in which he dies). Use the joystick to guide the character around the THORP complex - he can run, crouch, leap hazards and even scale certain walls. Pressing <Fire> only works if your laser gun is charged up (it can be charged up right next to your teleport pad - just position yourself next to it and press <Fire>).

Full details of how you move around are contained in the accompanying text-file, *HERO.DOC*. There you will also discover what objects you need to retrieve if your mission is to be successful - finding the radiation suit and the trapped man is only part of the whole solution.

One final point to note. The sound in the demo is not what will



■ Recharge-U-Like. Now you're fully armed, you can go and kill some robots. Beats them killing you.

them, you must then lead them to the teleport machine, so that they can escape.

In this exclusive demo, you can play the entire first level of *H.E.R.O.* and try to rescue the first

H.E.R.O.

By: IDS

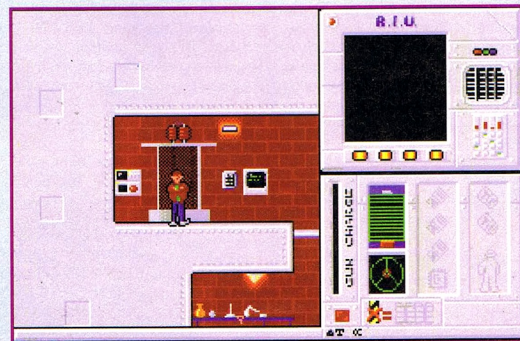
Machines: All STs (not TOS 2.06)

Memory Needed: 1Mbyte

Resolution: Low

Size: 205K

In *H.E.R.O.* (*Human Extraction & Rescue Operation*) you find yourself in the THORP complex with a mission to rescue some poor souls - trapped there because the complex' computer has gone haywire and deemed all human lifeforms to be a health risk. Because *H.E.R.O.* is set in the midst of a nuclear winter your actions could have repercussions for the entire human race - these people might represent the last of mankind. Having rescued



■ Your character is an impatient fellow isn't he? After all, it's only the fate of the entire human race you're deciding here. Task, tsks, etc.



■ Skillfully scaling the all-but-impassable wall, he was determined to deliver the Milk Tray at all costs.

appear in the final version of *H.E.R.O.* In order to meet STF's rigorous deadlines, the programmers put some plinks and plonks in place of the sampled effects that will appear in the game itself. For more details on obtaining the full version of *H.E.R.O.*, see the News pages starting on page 10. And watch out for a full review in these very pages soon.

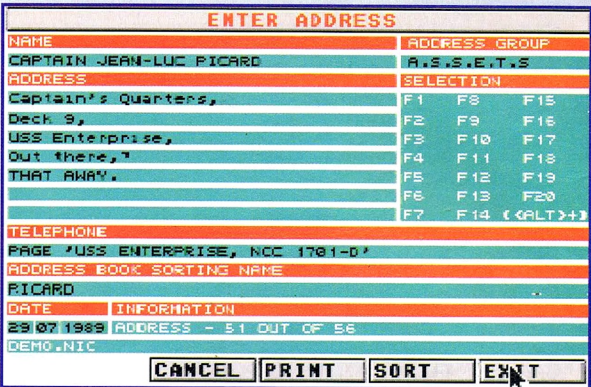
DYNAMIC ADDRESS DATABASE

By: Tunnle Soft Developments
Machine: All STs
Memory Needed: 512K (1Mbyte recommended)
Resolution: Low
Uncompressed size: 153K

This is one of the most user-friendly and simple-to-use databases you're ever likely to find, especially if you take up the author's manual offer (see below). Once you've decompacted DYANMIC.LZH to a blank disk, using STF_63.PRG, you're all ready to rock 'n' roll. Double-click on DYANMIC.PRG and wait for the main screen to appear. Once there you'll notice some Desktop icons – for now, just double-click on the disk marked Demo and a database of highly useful ST-related addresses will appear.

Click on one of the names and a new screen will appear with the name, address, telephone number and other details of the company or person picked. You can alter these by clicking on the various details, pressing <Return> when you've finished. When using the address details, the up and down cursor keys move between lines. Once finished, click on Exit to return to the main screen once again.

User-friendly
 Next, click on the right mouse button as indicated at the top of the screen to bring up the various menus. Go to the Options menu, click on 'Add address' and an empty screen appears – now can add your own names and addresses. Note that the 'Address book sorting name' option enables you (by typing in the surname of a person) to enter their name as, for example, Jean-Luc Picard rather than Picard, Jean-Luc, yet still find the good captain under P in the directory.



■ The heart of Dynamic Address Database. Here you can keep tabs on all your friends' whereabouts. If you have any, that is. (Ahem.)

The program is largely self-explanatory. Use the File option for opening, saving and creating new files. If you're keen to use the program to its full potential (and its user-friendliness certainly makes it one to be recommended) write to Tunnle Soft themselves for version

1.1 of the program, plus a fully comprehensive manual. Write a cheque/PO for £14.99, made payable to Martin Balmer, and send it off to: Tunnle Soft Software Support, 9, Manor Close, Thanington, Canterbury, Kent, CT1 3XA. Then wait.

HERMAN

By: Paul Thompson
Machine: All STs
Memory Needed: 512K
Resolution: Low
Size: 126K
NB: Herman will not run from within a folder.

Only a fool would dismiss this game as "just another Boulderdash clone". Even if you discount the brilliantly drawn graphics, fluid animation and excellent sound effects, you have to accept that Herman doesn't just add something to the genre, it completely revolutionises



■ Whoops! Who accidentally removed the plug then? If I were you, I'd grab that rubber ring, and I think I'd be pretty sharp about it, too.

the type and sets new standards for future versions. The basic aim of the game is to guide the famished Herman around 30 levels, eating all the lovely food – cherries, bananas or even burgers – before finding the exit and moving on to the next challenge. Standing between you and a full stomach are all manner of obstacles and hazards which must be carefully navigated or removed before you can feast. Food is guarded behind locked doors which require the correctly numbered key to open, or behind red and purple lego-like walls. Use the special switches to remove these, but beware! All purple walls are destroyed by any one switch, but red walls hid-

den from view remain stubbornly locked. Other obstacles must be removed by good old-fashioned dynamite – just place the bomb in the correct place and drop another object, usually a boulder, on to it (making sure, of course, that you leg it fast and don't get caught up in the explosion). **Shark-infested** Herman introduces a number of innovative concepts to the genre. There are monsters who must be avoided – any contact spells instant spontaneous combustion time. There are even areas of trapped water which, if they're

released, can swiftly flood the whole cavern. Obtain a life jacket first, otherwise you'll drown. But the danger doesn't end there – the waters are also shark-infested and potentially lethal to the unwary. With all these obstacles you'd be forgiven for being pessimistic, but there are a few objects to be found that can help. Skateboards enable you to freely travel levels with no fear of running into monsters – one touch and they're history. You can also pick up laser guns to fend off unwanted enemies, and you can carry as much TNT as you want (unless you pick up a key – then it's all lost). To detonate a piece, keep <Fire> pressed down until the TNT appears, then leg it. Placing bombs and/or TNT together before detonation causes a chain reaction, which increases the range and effectiveness of the explosion. A quick tip – this approach is vital on level four to free the key and bananas at the bottom of the cavern. So there it is. Get your joystick ready and prepare to reserve at least twice as much time for Herman as you previously thought: after all there's always the danger of saying 'just one more go'...



■ You have a habit of spontaneously combusting whenever you die. Take the beggars with you, eh?

A great offer
 Herman is shareware. Send a cheque or PO for £5 to P Thompson, 10 Herrington Court, Woodham, Newton Aycliffe, County Durham, DL5 4RA, and he'll send you a special version of Herman, which enables you to access any of the 30 levels at once. A bargain not to be missed!



QUARTET PLAYER 3

By: Dan Panke
Resolution: Any
Machine: All STs
Memory Needed: 512K
Uncompressed Size: 68K

Never fear! *Quartet Player 3's* resemblance to *QPlay3 (STF 59 Cover Disk)* is limited to the names, and the fact that they're both *Quartet* players. This version takes up less disk space and is much simpler

to use. You can also create an accompanying text-file that displays while the tune is playing and enables you to tell the world about your latest masterpiece.

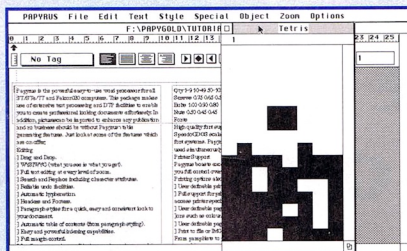
And it's all so easy to use. Just double-click on *Q_PLAY3.PR3* and follow the on-screen prompts. More details can be found in the accompanying text-files for each program. *MAKE_ONE.PR3* enables you to combine your *Quartet* tune, voice set and text-file into one file for loading, while *SEPARATE.PR3* reverses the procedure. All that remains is for you to put together a song, lie back and enjoy!

TETRIS

By: Shawn Hargreaves
Resolution: Any
Machine: All STs
Memory Needed: 512K
Size: 11K

This is a no-frills version of *Tetris* which can be run from inside any program that supports GEM – such as your brand new word processor or graphics program. There aren't any fancy features, except that you can access it at any time from the desk menu. So, after an hour's typing you can have

a quick blast on *Tetris* and work out all the aggression before returning to your dissertation on the role of the computer game in the increasing violence in society today. Just copy *TETRIS.ACC* to the root directory of the disk containing the program you want *Tetris* to run from and reboot the machine. *Tetris* should be all ready to go, and it only takes a mere 9K from your disk and memory.



■ Why you should need a break from the excellent Papyrus
 Gold is immaterial - Tetris will enable you to do so.

AUTO REZSWITCH

By: Martin McTernan Jr
Resolution: Low or medium
Machine: All STs
Memory Needed: 512K
Size: 7K

Annoyed at having a disk with one program on it that only runs in low resolution, while another on the same disk requires medium resolution to work correctly?

Aside from wasting precious moments selecting 'Set preferences' from the main menu to switch between low and medium resolution there's little you can do

about it. Or at least, there was until now. All you need to do is first, copy *DESKTOP.LOW* and *DESKTOP.INF* to the root directory of the disk affected, then place *REZSWIT.PR3* in the Auto folder, and finally re-boot. You are now given the option, via a message which prompts you on boot-up, of booting up in either low or medium resolution. Convenient, eh?

Note that if you're an STE owner with TOS 1.6 you'll also need *MEDREZ.PR3* for your machine to be able to boot in medium resolution (see below).

STE MEDIUM RESOLUTION BOOTER

By: Don Maple
Resolution: Medium
Machine: STEs with TOS 1.06/1.6
Memory Needed: 512K
Size: 2K

While *RezSwitch* can bring relief to thousands of ST owners out there, those of you with TOS 1.6 (not 1.62)

could still be left cursing the fact that a bug in this version of TOS prevents your STE from booting in medium resolution.

Fret no more. Just place *MEDREZ.PR3* in the same Auto folder as *REZSWIT.PR3* and your STE will soon be happily booting in whatever resolution you require.

COVER DISK BACKUP

By: Brian Tilley
Resolutions: Any
Machine: All STs
Memory Needed: 512K
Size: 13K

To prevent irretrievably corrupting your Cover Disk you should always

make a backup (or even two). And with this program, it couldn't be easier! Just double-click on *CD_BACK.TOS* and follow the on-screen instructions. If you're a subscriber use this to back up your Wonder Disk too. Just remember, you can never be too careful... **stf**

TEN TIPS FOR COVER DISK SATISFACTION

- 1 Write-protect your Cover Disk by sliding the black tab so you can see through the hole. This prevents you from accidentally erasing data.
- 2 Always make a backup using the *ST FORMAT Backup* program. See the instructions above.
- 3 Always read the instructions for the program you are using on the Cover Disk pages and in any document file that is on the disk.
- 4 Never run software directly from the Cover Disk except the *Backup* program, and always use your backup.
- 5 Never attempt to decompress self-extracting TOS files on the Cover Disk. Always copy them to a blank disk.
- 6 If you have any general problems with your ST try your manual. Still stuck? Write to: ST Answers, *ST FORMAT*, 30 Monmouth Street, Bath, BA1 2BW.
- 7 If you can't load, copy or back up your Cover Disk programs then you may have a faulty disk – it happens sometimes.
- 8 Send the disk and a padded self-addressed envelope to: *ST FORMAT* October Disk Returns, PO Box 21, Davenport, NN1 5BU. We pay the return postage. Please don't send faulty disks to our Bath or Somerton offices because we don't keep stocks of Cover Disks there.
- 9 If you are having problems with a Cover Disk program go back and read the Cover Disk pages and any DOC files on the disk. If you still can't get the program running, call the *ST FORMAT* Cover Disk Hotline on 0225 442244 on Wednesdays between 2pm and 6pm only – we can't accept calls at any other time.
- 10 If you have other hardware or software queries, contact the manufacturer or publisher. Alternatively, ring the official Atari Helpline on 031 332 93233 between 6pm and 11pm Monday to Saturday and 8pm and 11pm on Sundays.
- 11 *ST FORMAT* Cover Disks are double-sided. If you have an old STFM and cannot read the Cover Disk then you should upgrade your ST to a double-sided drive.

WE WANT YOUR PROGRAMS

We pay for your software – so if you've got anything that's good, original and preferably short that you think really deserves to go on *STF's* Cover Disk, send it with this form and full documentation to Nick Peers, *ST FORMAT*, Cover Disk, 30 Monmouth Street, Bath, Avon BA1 2BW

Name _____

Address _____

Daytime phone _____

Program title _____

Total size in K _____

On a separate sheet, explain concisely what the program does and why you happen to think it's so brilliant.

Remember to: ■ Include on-disk and paper documentation ■ Write your name and address on the disk ■ Use a virus-free disk ■ Keep a copy of your program, because contributions are non-returnable ■ Enclose an attractive bribe. Not that it makes a difference, of course.

Please sign the following declaration: This program is submitted for publication in *ST FORMAT*. It is wholly my own work and I hereby agree to indemnify Future Publishing against any legal action should copyright problems arise.

Signed _____

Atari at Future Entertainment Show

by Simon Forrester

Atari have confirmed that they will be attending the Future Entertainment Show (26-30 October, at Earls Court 2). "We recognise the excellent timing of the FES," says Jean Richen, Atari European Marketing Manager. "We believe it offers us a great opportunity to show the Jaguar to a very large audience just before Christmas." Atari will be attending the show in force, bringing with them previews of some of the biggest releases for their machines – in particular the Jaguar (and this will be its first major public appearance).

Atari ST owners needn't feel left out, either. The Future Music Village will be packed with the best

in ST and musical equipment – and the rest of the show should hold a few pleasant surprises as well.

The FES is your chance to snaffle up some serious computer kit at special prices, meet the people the computer world is watching, see the latest in entertainment and processing technology before it's even seen UK release, and take part in the many forums, Q&A sessions and discussions taking place. But then everybody knows just how hot the FES is.

If you're not at the FES this year, you really don't deserve to call yourself an ST user. Ring 0369 4235 for more information now, or you may never get on our good side again.



■ Don't worry - Mr Blobby won't be attending the Future Entertainment Show this year. If he does turn up, we'll snap every bone in his body.

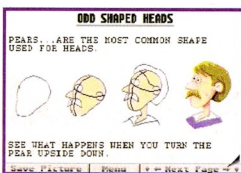
ST software floodgates open

by Nick Peers

IDS have obtained the rights to distribute the brand new Dutch ST release *Spherical* in the UK (see the review on page 60). Available for just £13.99, *Spherical* heralds a surge in publishing activity from IDS, the company behind the highly respected *ST Handbook*.

Their next release, *H.E.R.O.*, comes from IDS' own stable and looks set to be even more impressive – and you can try it yourself on this month's Cover Disk. The final version, due for release in September, features hundreds of levels, Save Game options, revamped sound, and over 300 frames of character animation. (Well, we were impressed.)

Following in October is *Team*, an ST-specific *Sensible Soccer*



■ Learn how to create decapitated cartoon heads with IDS' forthcoming release, *Grafix*, then program a really nasty game that'll shock grannies everywhere.

challenger. For just £24.95 1MByte STE owners will be able to take on their worst enemies (such as West Bromwich Albion or Aston Villa) and give them the damn good thrashing they deserve (glad to see

our news coverage is as objective as ever – Trent). Team aims to fully utilise the STE hardware capabilities with multi-directional hardware scrolling, blitter-chip sprites and 50KHz DMA stereo sound.

1995 sees the release of *Alien Thing*, which intends to pick up where *Alien 3* left off, as well as boasting a shoot-'em-up that will "knock *Xenon 2* into orbit", according to Vic Wright of IDS.

There are also two more serious packages in the pipeline. *Grafix* aims to teach you how to use art packages, and is set for release in November or December this year, while the *Advanced STOS Programmers' Guide* is planned as a complement to the many beginners' guides that are currently available. Exact details of *ASPG* are still sketchy, but it will be compiled by the *STOS* experts and deal not only with *STOS*, but also with its numerous extensions, such as Missing Link.

ST FORMAT will have full reviews of all these packages as soon as they're available – and we've got an in-depth interview

H.E.R.O. SPECIAL OFFER

If you've enjoyed the demo of *H.E.R.O.* on this month's Cover Disk, you'll no doubt be delighted to know that we've got together with IDS to offer you *H.E.R.O.* at a special price of £12.95 (including P&P). While you're at it, you might as well order *Spherical* at the same time, for £13.99 (including P&P).

with the Team coders next month. Any queries or orders should be directed to IDS, who are on 021 459 4340.



■ Why do football pundits say things like, "All of Manchester must be glad of Manchester United's success"? Nothing to do with the fact that they never get the opportunity to be glad about City's success, surely?

I wish to order the following item/s:

☐ *H.E.R.O.* (all STs with a minimum of 1MByte of memory)

£12.95 (special STF price)

☐ *Spherical* (all STs)

£13.99

TOTAL:

My Name

My Address

Cheques should be made payable to Wright & Hayes, and they should be sent with your completed order form (or photocopy) to IDS, 1 Fordhouse Lane, Stinchley, Birmingham, B30 2NH.



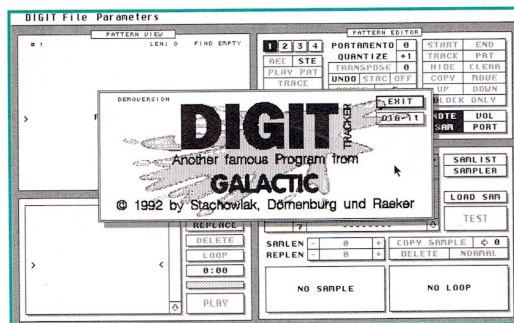
DA's Layout goes solo

by Nick Peers

CGS Computerbild is releasing DA's *Layout* as a standalone program. This stunning DTP package was previously only available with DA's *Repro*, but CGS have now made three 'solo' versions available: true-colour for the Falcon (£399); a black-and-white version for monochrome-display Ataris (£199) and a cut-down Junior version (£79) with none of the vector modules.

DA's *Layout* boasts some truly impressive features, including the ability to export documents in PostScript format, to morph text and graphics, and to create documents made up of different sized (and even different shaped) pages. A number of add-on support modules, such as photoscreening, are also planned, at £80 each.

Another imminent CGS release is Janus, the first hard-

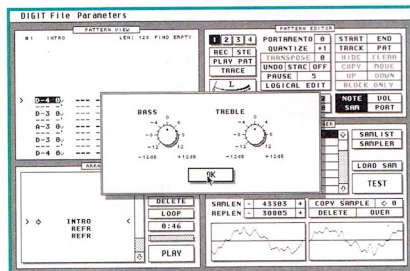


■ A shot from the soundtracker *Digit* v1.1, which was featured on Cover Disk 61. Now *Galactic* plan to release *Digit MIDI* for the Falcon.

ware-based ST/TT emulator for PC-compatibles. Available for £299 (including TOS 2.06), Janus makes full use of the PC's extra clock speed (using 'cards' rather than GEM to accelerate the system), and can display in four emulation modes – at resolutions of up to 1,280x960. There's a local mode which should be fully compatible with all ST software, but cur-

rently this is monochrome only. Janus can be given a hard drive partition of 32Mbytes on the PC, and can access the rest of the hard drive to grab any ST-compatible files it may require, such as graphics and text-files. Planned future add-ons include MIDI ports, which will bring the realities of a decent MIDI system to the PC. Turn to page 48 for a review of the *Gemulator*, a similar product.

Also in the pipeline, *Digit MIDI* (ETBA) for the Falcon combines synthesis and sampling over four tracks. *Digit MIDI* makes full use of DSP effects (reverb, delay and quorous), MIDI and is compatible with SP/Dif interfaces. And there's *Perfect Keys*, a neat little box that connects PC keyboards and mice to your ST, all for £69.



■ There's nothing like adding some thumping bass to your masterpiece to attract attention. With *Digit MIDI* you'll have even more control over how your music sounds.

FALCON MAKES VIDEO EFFECTS MOVE

DETAILS HAVE REACHED THE ST *FORMAT* office of a cunningly disguised Falcon posing as a £4,000 sound-to-light video effects generator and dynamic screen-writer (in layman's terms it's the widget used to generate backdrops for programmes like *The Word*). Such names as MTV, Culture Beat and The Smashing Pumpkins have been linked with this device, marketed in Britain as the *Sonovista*™ by BCS.

Designed for use in the music and performance world, programme directors and stage managers "should find it an endless source of easily produced impressive visual effects", according to the brochure we received. Users of the Falcon will no doubt verify the claims that the *Sonovista* produces a true-colour output using Digital Signal Processing to produce real-time effects. Perhaps this is the first time the 32-bit Falcon has been exploited to its potential.

Call the chaps and chappesses at BCS on ☎ 0625 615379 if you're interested and have £4,000 to spare.



■ Now you know who to blame when you get one of those glaring headaches from watching *The Word*. (Terry Christian - Ed?)

If you're interested (and you certainly should be), more details on these and other CGS Computerbild products can be gleaned by calling them on ☎ 081 679 7307 and asking them politely for some info.

RADIATION DEATH FRENZY

BOASTING A 'MAJOR BREAK-through in office technology', GEPRO have perfected a pair of glasses. They're not just any glasses, though – these are magic glasses. They give you 99.9 per cent protection against all ultra-violet, electromagnetic radiation (so how exactly did they arrive at that figure, then?) on frequencies from 20KHz to 200MHz, and wavelengths of 200nm to 700nm.

Obviously you need to be wearing them. Coming with a neat carrying case, the specs cost £32.99 a pair or £29.99 as clip-ons.

If you're one of those folk who worry about your eyesight (but don't care what kind of radiation you expose the rest of your face to) call GEPRO on ☎ 0689 851 206 for more information. And apart from that, we're making no comment whatsoever.

QUILL/TABBY OFFERS

This month's Cover Disk includes an exclusive demo of *Quill*, also from CGS Computerbild. Once you've tried it, you're bound to instantly want to get hold of the full version. Being the generous chappies they are, CGS have put together a special offer for your consumption. Snap it up while you can.

Quill £24.99 (RRP £29.95) ☐ *Tabby and Quill* £69.99 (RRP £29.95) ☐

Name

Address

Just send the completed order form (or a photocopy), together with your cheque (made payable to CGS Computerbild), to CGS Computerbild, 231 Northborough Road, Norbury, London, SW16 4TU.

Analogic Computers (U.K.) Ltd

Unit 6, Ashway Centre,
Elm Crescent,

Kingston-Upon-Thames, Surrey KT2 6HH

Mon-Fri. 9am to 6.30pm Sat 9am to 5pm

TEL: 081-546-9575

FAX/TEL: 081-541-4671

ANALOGIC
ANALOGIC
ANALOGIC

OFFICIAL ATARI REPAIR CENTRE

• COMPUTERS • MONITORS • REPAIRS WITHOUT DIAGNOSTIC FEES

520/1040 ST/STM/STF/STFM/STE	£59.95	} including delivery back by courier service
Monochrome, Colour Monitors excluding CRT, L.O.P.T.	£59.95	

★ We pick up computers for repairs and memory upgrades for Next Day delivery to us by Courier Service for only £6.00 + VAT

MEMORY UPGRADES

MARPET DEVELOPMENTS OFFICIAL XTRA-RAM DELUXE INSTALLERS

520 ST/STFM to 1 Meg	* £59.95	520 STE to 1 Meg	* £17.95
520 ST/STM/STF/STFM to 2.5 Meg	* £79.95	520 STE to 2 Meg	* £59.95
520 ST/STM/STF/STFM to 4 Meg	* £129.95	520 STE to 4 Meg	* £114.95

* Free
Fitting

* Free
Fitting

PROTAR PROFILE SERIES II HARD DRIVES QUANTUM/MAXTOR MECHANISM WITH CACHE

Compatible with all ST/STF/STFM/STE/Mega ST/Mega STE/Falcon

Profile 50DC & 85DC	£POA	Profile 170DC	£309.95
Profile 120DC	£269.95	Profile 240DC	£369.95

● POA for Higher Range of Profile Series II and SCSI Bare Drive

GOLD AWARD WINNER PROTAR PROFILE SERIES II HARD DRIVES have features such as:

- Auto-Booting ● Auto-Parking ● Read/Write Access ● Password Privileges ● Selectable Boot Partition
- DMA Thru Port ● Quiet Fan ● Device Number Switch ● Hard Disk Management Software package
- Full Utilities package and De-bugging Software ● 45 Watt PSU and all necessary wiring in place to mount another Bare Hard Drive in elegant housing.

SCSI BARE QUANTUM HARD DRIVES WITH CACHE

50Mb & 85Mb	£POA	170Mb	£199.95
120Mb	£179.95	240Mb	£229.95

STFM, STE, FALCON 030 COMPUTERS

**We shall try to beat any genuine
advertised Falcon prices**

P.O.A.

STE/STFM 2.06 TOS SWITCHERS

with Hardware Switch

The only Solderless DIY Kits available

STE TOS 2.06 Roms	£39.95	STE/STFM/STF/ST TOS Switcher	
STE TOS Switcher	£39.95	inc. 2.06 Roms	£59.95

MONITORS

AMITAR £129.95
High Resolution Monochrome Monitor

POWER SUPPLIES

STFM/STE Power Supplies (Service Exchange)	£24.95
NEW STFM/STE Power supplies	£49.95

PRINTERS — HP310 / 510 / 550 Colour — POA



- All prices include VAT
- Fixed charge for repair does not include Disk Drive Replacement & Keyboard
- All prices subject to change without notice
- We reserve the right to refuse any ST Repair
- Please allow 5 working days for cheque clearance



JAGUAR
HARDWARE & GAMES AVAILABLE NOW

(subject to availability)

GUARANTEED SAME DAY DISPATCH

**FREE TOS 2.06 SWITCHER FITTING WITH ANY
REPAIR/MEMORY UPGRADE**

Professional Service with no surcharge

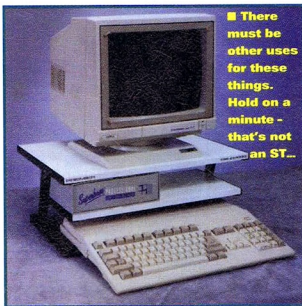
WHILE-U-WAIT!!

♦ MEMORY UPGRADES ♦ TOS UPGRADES ♦ DISK DRIVE UPGRADES ♦ many REPAIRS

**SPECIAL
OFFER**
FOR A
LIMITED
PERIOD

A metal fing

PREMIER DEVELOPMENTS, metal fing gurus of the computer world, have just released three more stands for your ST. The units are shelved with all-round access for wires, plugs, and other miscellaneous trailing bits. The stands are built with strong steel side members, easy-to-clean MDC shelving and non-slip feet. You'll be able to take a closer look at the units by simply walking into your local computer retailer - keep an eye out.



Another machine!

THE ULTRA-POWERFUL 'SUPER-ST' Medusa T40 has finally been officially released in the UK. This Swiss machine is said to combine the best of the ST, TT and Falcon, containing a 26MIPS Motorola processor running at 64MHz, supported by a 32-bit system bus running at a cool 32MHz.

"Medusa T40 has been designed as an open system for professional

use in DTP, graphics and CAD applications. She is much faster than the TT, probably outperforming Mac Quadras," claim System Solutions, Medusa's UK distributor.

Sounds good, doesn't it. The basic system will cost around £3,520 including VAT. If you're tempted, contact System Solutions at their London office, on 081 693 3355.

MORE ATARI SHOWS ANNOUNCED

AFTER THE STORMING SUCCESS of the Atari Shows in Bristol, Birmingham, Leeds, Glasgow and London this August, more shows have been planned for the autumn. These new shows will be held at:

November 12, Leeds
November 13, Glasgow
December 10, Birmingham
December 11, London.

With exhibitors including CGS Computerbild, Compo Software, Goodmans PDL, IDS and System Solutions, Atari owners should

jump at the chance to see the latest products on show for the ST, TT or Falcon - especially if you can't make the Future Entertainment Show (Earls Court 2, 26-30 October). There will also be the chance to snap up some great software and hardware bargains at special Show Prices, which means great discounts for us all. More information can be obtained from any of the companies mentioned above, and *ST FORMAT* will carry full details as soon as the venues are confirmed.

BARGAIN HUNTERS, READ ON

LADBROKE COMPUTING HAVE just announced two special summer offers, at amazing prices. The first item is a BT-approved high-speed fax/modem, achieving 14,400bps with fax, and 57,600bps as a modem. And if you prefer funny unintelligible numbers, this reads as V42bis, MMP5. At £159.99, the package comes with telecommunications software, as well as a four-year warranty.

And then there's the second item - a 350MByte hard drive, coming complete with an ICD link and the latest ICD software, including HDTurbo, an acclaimed hard drive management utility. Again, this drive comes at quite a special price, being £399.99 and everything.

For either of these two offers, ring Ladbroke on 0772 203166. Now is the ultimate time to upgrade your ST. **stf**

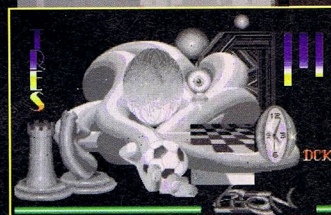
ST FORMAT

WHY DO THEY DO IT?

In next month's issue *ST FORMAT* investigates the world of the demo. Some of the best programmers spend their time writing demos that will be distributed as PD. They can make the ST

display more colours, scroll faster, play more sounds than is theoretically possible - for no obvious reason.

Are demo coders taking the ST one step beyond its capabilities or simply wasting their time and talent?



Why do they do it?
What do they do?
How do they do it?
And who are they?



Find out on 11th October

START MAKING SENSE

The only real way to increase the power of your ST is to tell it exactly what you want it to do. Simon Forrester gets into programming languages.



Why should I learn to program?

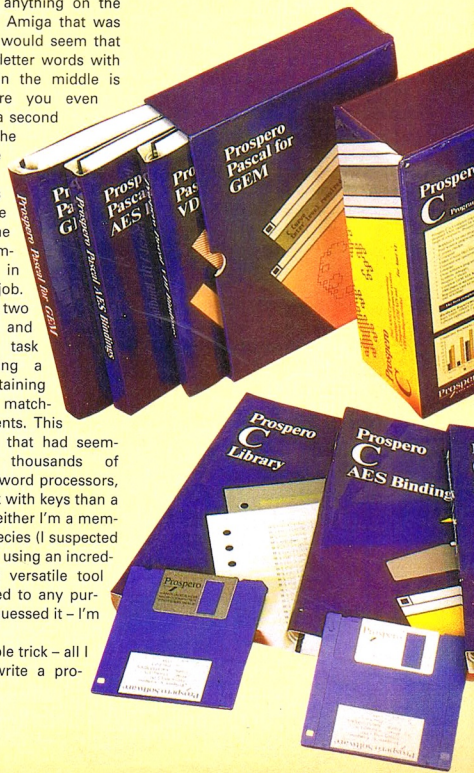
There are two main reasons why you should acquire this skill, the first being the ability to say "hey - I'm a computer programmer" at parties and get slapped for being such an overtly glib git. The second, slightly more valid reason is that you'll be in possession of a computer infinitely more powerful than the one you started with, because you'll be helping it by sharing your infinitely more powerful brain. Alternatively, you'll be in possession of a computer infinitely more powerful than the one you started with because you became a new-wave console programmer with no idea what you're doing, but with a salary big enough to buy a few hundred STs and gaffer-tape them together.

Stop right there. I want to tell you a little story. Picture the scene - I had a dictionary file from a crossword compiler program, and I needed to search through it for six-letter words with a double letter in the middle (such as 'wheels'). It's a simple enough request, within the power of machines created a decade ago. The reason why I needed to do this is none of your business, quite frankly. Anyway, the obvious choice of action was to load the file into a word processor, and use a Find command. Question: is there a word processor you could get to do that? I searched, believe me. It's not just an ST thing - I couldn't find anything on the Macintosh, PC or Amiga that was capable either. It would seem that searching for six-letter words with a double letter in the middle is impossible, before you even think of creating a second file containing the words you've found.

Nothing is impossible, save impossibility. In the end, I wrote a simple program in BASIC to do the job. The program took two minutes to write and performed the task admirably, creating a second file containing about 300 words matching my requirements. This wonder program, that had seemingly defeated thousands of pounds'-worth of word processors, required less work with keys than a sardine tin. Now, either I'm a member of a higher species (I suspected it all along), or I'm using an incredibly powerful yet versatile tool that can be applied to any purpose. Hmm. You guessed it - I'm stupid after all.

It was a simple trick - all I had to do was write a pro-

- gram to follow these steps:
- 1 Read in a word of the text file.
 - 2 Check whether the word is six letters long.
 - 3 If the word isn't six letters long, go back to step 1.
 - 4 See what the third letter of the word is - for 'wheels' it's the letter 'e'.
 - 5 See what the fourth letter of the word is - another 'e'.
 - 6 If the two letters are different, go to step 1.
 - 7 Any word that gets this far has qualified - it has six letters (step 3 sorts that out), and its middle letters are identical (which is taken care of by step 6).





What's going on?

**TASK
LANGUAGE
MACHINE CODE
PROCESSOR**

You've learnt what a language is, but how does it all work? Does the ST know every language ever written? Will it be able to cope with languages yet to be written? In layers, no, yes. That's the beauty of languages. Your ST doesn't understand a single one, but it'll be able to run programs written in languages that haven't been developed yet. Your ST does these things in layers, as the diagram suggests. Hiding at the bottom, underneath everything else, is the processor – the chip inside the computer. This chip knows only one language – known as machine language, but called 68000 because that's the name of the chip. Any tasks have to be written in a language (the next layer down), which converts the program into machine language, so that the processor can understand it.

This language either compiles the program, saving it out as a machine code program that can be run independently, or it interprets the program, converting each instruction into machine language as the program runs. Either way, the language has to be converted into the one language the processor understands.

What next?

Over the page we look at a range of languages, and which languages suit which task, then we suggest a few packages you could try. You don't need to know loads of different languages, by the way – some languages excel in some areas, but they all have standard abilities.

- 8 You can even print your winning word on the screen to indicate success.
- 9 Write the word out to the second file.
- 10 Go back to step 1.

Oops

Sorry about that. I've just exposed you to your first program. You might not have noticed it was a program, but it was. You can't fool all of the people all of the time, but I just managed over 40,000.

You could start off with step 1 producing the word 'sugar', and you'll get as far as step 2. If you go through with the word 'carbon', you'll get as far as step 6 before returning to step 1 and the next

word on the list. If you try 'hollow', you'll get right through to step 10, having written the word to the new file. This task is like any other – easier when broken into smaller tasks. In BASIC, the language I chose to write this program with, every step was easy – beginners may need to refer to a manual for occasional help with a command, but that's simple enough, too. Congratulations – you now know, to a great extent, the basics of programming. That was fairly painless, wasn't it? Can I go home now? (No, finish the feature – Trent)

You can't stop now

That's right – I'm going to show you a line of BASIC. You could use 68000, C, Pascal, COBOL, or one of the many other languages around, but I thought I'd be gentle, just for now.

We're going to look at this line of BASIC in the style of someone trying the bath water with their big toe – we're going to ease our way in. This is step 2 of our original program mutating into BASIC.

If the length of the word is not 6, then go to step 1.

Our word is represented by 'WS'. You don't need to know the complexities of why this is so unless you want to get into BASIC in particular, so just accept the fact for now. The bits BASIC recognises are in capitals. In readiness for any language you eventually pick on, it's known as a string – it's a string of letters (or characters).

```
2 IF (the length
of) WS (isn't) 6 THEN GOTO
1
```

Did you notice some of the words transforming into BASIC commands already? This programming lark really is easy. The line starts with the num-

ber 2 so BASIC knows which order to execute the commands in. Next, we're going to replace the words 'is not' with the mathematical expression '<>' meaning 'is bigger or smaller than' – much the same thing.

```
2 IF (the length of) WS6 THEN
GOTO 1
```

The only vaguely difficult bit is when you have to express 'the length of'. BASIC can find the length of a string, in our case W string or WS, with a simple expression – 'LEN'. If 'LEN' is left out, we would be asking 'is WS not 6?' whereas with 'LEN' we're asking 'is LEN(WS)6?' or 'is the length of WS not 6?' WS itself can never be 6 as it's a word, not a number.

```
2 IF LEN(WS)6 THEN GOTO 1
```

And there you have it – a complete line of BASIC. If you came across that line again, you'd understand it. If you got ten of those together, people would look at it and run away, screaming. They think of it as one huge knot of equations and calculations, instead of a series of lines (or steps), each line being made up of simple components. If you looked at that same program with a knowledge of the components, you'd be able to follow what was going on, and you'd understand how it did what it did.

"Dear STF,
The thing is, that was BASIC. What if we want to write in C? How about just getting down to some 68000? BASIC stands for Beginners All-Purpose Symbolic Instruction

Code. 'Beginners'. What happens when we want to use a really scary language? What if we want to feel the throb of a well-honed piece of red hot processing power beneath our fingertips?

I don't want to use MAGE, GFA or STOS, featured to death on page 80. I want to use a proper language – a morally upright language that portrays the kind of moral pillar to society that I am.
Mr RJP Taylor, War Veteran"

Next language...

Has someone just replaced the British postal service with someone efficient?

He's right, though – you will want to go beyond BASIC at some point. Using a home computer five years ago, you'd have been restricted to starting with BASIC and going straight on to the infamous machine code (crowd draws breath through teeth). Nowadays, there's a whole host of languages at your disposal, none of which are too difficult to learn.

People go to college to study Pascal but, meanwhile, thirteen-year-olds teach themselves over the equivalent amount of time by reading books and messing about. After a few months, they've muddled through a program like the one we've just looked at. Two years later they've written their own word processor.

If you do go to college and study Pascal, don't study it for longer than three years. After four years you'll turn into a hippy.

GLOSSOLALIA GLOSSARY

Right. You know what a language is, how it's built up into programs and how those programs work with the ST's processor.

There are a lot of languages out there, though, and you need to find the language most suited to what you like doing. Some languages are better at manipulating complex maths, whereas others are designed for moving and processing large blocks of memory for things like sprites in computer games.

As we go through each language, we'll take a snippet of a program and rate it for ease and structure, as well as power. We'll also look at the different versions of that language available to you. Languages are like text-files – they're all rigidly set, but can be used with several different word processors.



COBOL

The COmmon Business Orientated Language is one of the languages that are worth learning, having carved its niche in the world of computers as an effective data storage and retrieval system. Other than its information processing functions, however, COBOL is a language fairly devoid of any functions that don't involve mass data

processing. Steer clear. It may be structured, but it's not versatile in the slightest.

Background

It was developed by people in suits, working for other people in suits, to be sold to respectable people. In suits. Since its creation it's been covered thoroughly by col-

leges as well as businesses, and you can end up studying COBOL full-time.

Recommended use

It has little use to anyone not writing a spreadsheet.

POWER: 2/10
EASE OF USE: 6/10

FORTRAN

This one was created specifically for FORMula TRANslation, and it's a deathly dull little language.

FORTRAN's capable of little more than complex mathematics, and doesn't make use of your ST in any other way. This is a 'proper' language, as used by people who

wear wire-rimmed glasses, and should therefore not be approached by anyone in even vaguely casual shoes.

Background

Developed by some nutter somewhere, most like.

Recommended use

Deep maths processing and melting brains. Avoid this language like the plague and give your ST and your brain a break!

POWER: 7/10
EASE OF USE: 4/10

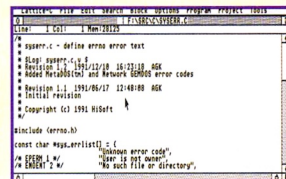
C

C is the trendy thing to be programming in these days. The main reason C is such an impressive system is that it was designed to per-

form in the same way as 68000, working closely with the processor and other hardware itself. Surprisingly, C also manages to be fairly constant over several machines, even though the hardware it works so closely with changes dramatically. In this respect, C provides the same comfort as a Holiday Inn – it looks exactly the same wherever you go. You'll have a definite advantage if you ever come to program on the PC, because you'll already know how to achieve results, and can concentrate instead on the few machine differences. Bear in mind that C is incredibly structured, but these structures are almost impossible to understand at first.

Background

C was originally developed by Dennis Ritchie, a clever man by all



■ Lattice C – calm down now, calm down. It's not that exciting.

accounts. Jammy, too. Since its original launch, the language has gone through a few face-lifts, producing C+ and C++, but still resembling the original in most respects. Bet he's got a nice car to boot.

Recommended use

Anything you like – it's as versatile as assembly without the terror. Its structure bends it to any whim.

POWER: 8/10
EASE OF USE: 4/10

C is a compiled language, meaning that it needs to be converted into 68000. Unsurprisingly, this job is done by a compiler. C language packages are built up of two parts: the editor and the compiler. The compiler doesn't actually translate the language, but it creates a 68000 program to do the same job as the C listing. This is how all compiled languages work.

Lattice C

£149 HISOFT 0525 718181

As with most HiSoft software, Lattice C is an incredibly powerful and complex compiler. The preferences stretch on for miles, enabling you to tailor the package to work exactly to your requirements.

STF RATING: 90%

Prospero C

£102.12 PROSPERO 081 741 8531

Not quite as feature-laden as HiSoft's compiler, Prospero's package takes a slightly simpler route, which may not always be a bad thing. You'll notice a slow-down in the editor if you're used to Lattice C, but the code produced at the end is said to be marginally faster.

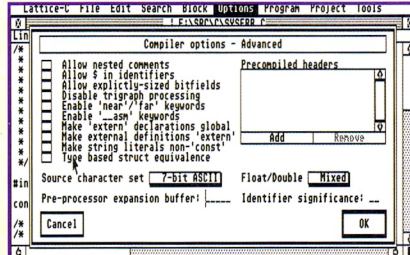
STF RATING: 88%

C Interpreter

£59.95 HISOFT 0525 718181

Now here's a diversion – if you can't quite get the hang of writing and compiling a C program, and then running a machine code program, this might be the obvious choice for you. Instead of compiling the final program, C Interpreter actually runs the program itself, converting the instructions to machine code on the fly, as it were. This is the ideal way to learn to program in C, because you don't have to keep stopping and starting – you can test the program you're writing and make changes quickly and easily.

STF RATING: 83%



■ Lattice C. Compilers are odd beasts. They take seemingly ordinary code, stuff we can understand, and turn it into effective technical gibberish. Impressive, and dead useful too.

68000

The big scary one. 68000, assembly, machine code, machine language or whatever you want to call it, is renowned as one of the scariest languages of all time.

Machine languages are a hassle because their commands work on a microelectronic level, based on binary – the system of reducing numbers to a series of 1s and 0s, corresponding with electronic states. Everything your ST does comes down to machine code.

Background

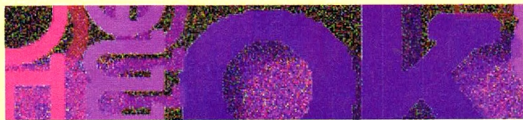
The history of the 68000 language is the same as the chip itself – the

structure owes a lot to 6502, the chips previously used by both Atari and Commodore machines. Unlike some other languages, 68000 was developed purely for commercial reasons – no university mathematicians here.

Recommended use

You can use it for anything you like. Normally the only things written directly in 68000 are games, and other applications requiring fast but simple calculations.

POWER: 10/10
EASE OF USE: 0/10



Because 68000 doesn't need to be compiled (it's already in 68000, you see), you'll want an assembler. Assemblers convert text instructions (assembly language) into the numbers those instructions directly represent (it's a direct translation). There are two widely-known assemblers for the ST:

Devpac

£79.95 HISOFT 0525 718181

Now developed as far as version 3, this package consists of a GEM-style text editor for writing and working through your assembly programs, and an assembler routine boasting incredible speed (35,000 lines of code per second). It's a tasty little number and the development time means that it's well thought out and implemented.

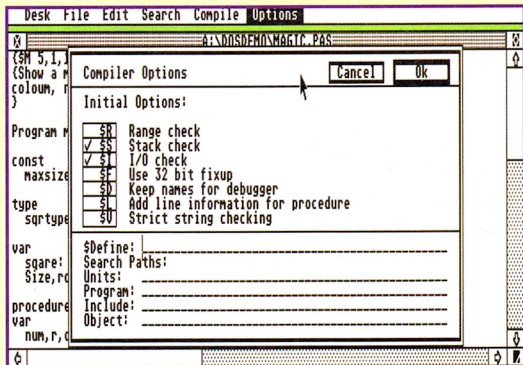
STF RATING: 91%

GFA Assembler

£50 GFA DATAMEDIA ST FORMAT BACK ISSUES (PAGE 85)

Featured on Cover Disk 35, *GFA Assembler* is the less powerful of the two packages. Taking a slightly different approach to the job in hand to *Devpac*, *GFAA* attempts to assemble lines while they're written, checking for errors as it goes. This makes the package easier to use while you're picking up the language, though it doesn't have some of the poker features that *Devpac* boasts. We could also go into the fact that it's an assembler based largely on macros, but that's beside the by. It works and that's all you need to know really, isn't it?

STF RATING: 75%



■ Fascinating fact #334: Pascal used to be known as ALGOL back in the '60s, but it was nowhere near as friendly as its French sounding epithet.

Pascal is famous for its libraries, enormous archives full of different routines, which you can learn from and adapt for your own use. There are only two packages worth considering as yet:

High Speed Pascal

£99.95 HISOFT 0525 718181

As with *GFAA*, this compiles as you type, giving interactive help when you're writing your program. It's also very fast, as the name implies, crunching its way through 20,000 lines in under a minute. You shouldn't find yourself being hassled by the editor.

STF RATING: 90%

Prospero Pascal

£102.12 PROSPERO 081 7418531

Using a friendly GEM-style editor, *Prospero Pascal* gives the impression that it's a simple package, but 600 pages of well-written manual suggest otherwise. You'll still find syntax correction and a straightforward menu system, but things are definitely getting more complex.

STF RATING: 89%

Pascal

One of the all-time structured languages, as easy to get into as BASIC but useful as well. Now widely used in industry environments, *Pascal* is an excellent choice of starter languages, because it's still a sought-after skill, while not taking long to master.

their new 'computer', they first came up with ALGOL, which soon mutated into Pascal, one of the original languages.

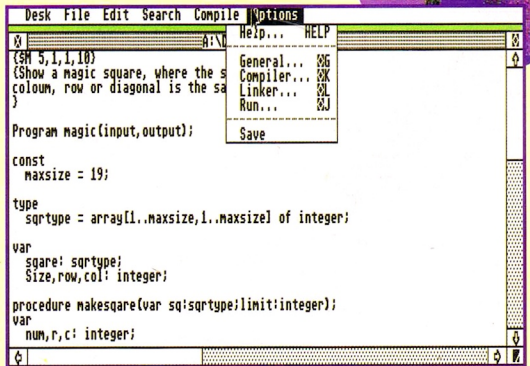
Recommended use

Training yourself in programming.

POWER: 5/10
EASE OF USE: 8/10

Background

Most people will tell you that the 80's were the decade of the computer, but the real revolution was happening 20 years earlier, when the large American corporations set to work on perfecting the computer as we know it today. When these people came to designing a language to work with



■ Pascal - does it make sense yet?



BASIC

"Eugh" screams the crowd, as someone wheels a senile, immobile old man on to the stage and announces him as the acrobat act. BASIC is an easy language to pick up, and a fairly useful one at that, but it really isn't something you should dwell on for any longer than it takes to get the hang of programming in general. The problem with BASIC is that it's... well, basic, really. The idea behind the system was to provide something that peo-

ple could pick up quickly and use without too many problems, spreading the language's ability across many applications, but leaving no special abilities or strengths. There have been several upgrades to the language, giving it some of the power it badly needs, but in its raw form it has little to offer.

Background

Developed by an academic team at the dawn of time, it only had the

limelight when 8-bit computers had it built in with the system. On the ST, it's a loadable language like any other, apart from the fact it's not very good at anything, really.

Recommended use

BASIC has always been a good language for small tasks as opposed to larger applications.

POWER: 3/10

EASE OF USE: 10/10

```

A File Find Run Move Block Help Info
Module 1: A:\EXAMPLES\PALETCHE.C
nt win: /* window handle */
nt menu_title, menu_item: /* menu selected */
nt m_line, m_n_point, m_n_erase, m_n_quit, m_n_ok, m_n_style, m_n_text, m_n_c: /* menu item numbers */
nt x, y, old_x, old_y: /* mouse co-ordinates */
nt event_type: /* event type (keyboard, mouse, ...) */
nt ch: /* character typed */
char text[255]: /* char to write on the screen */
nt draw_type: /* indicate if clear, draw point, draw line etc */
nt info: /* the info dialog box number */

/* Text Style dialog box variables */
nt style: /* box number */

```

■ **HiSoft C - C** is the Take That of languages. And, like Take That, C has undergone a few image changes during its time, and is now known as C++. At least it doesn't upset kids and outrage their mothers (much).

```

A File Find Run Move Block Help Info
Module 1: A:\EXAMPLES\PALETCHE.C
nt win: /* window handle */
nt menu_title, menu_item: /* menu selected */
nt m_line, m_n_point, m_n_erase, m_n_quit, m_n_ok, m_n_style, m_n_text, m_n_c: /* menu item numbers */
nt x, y, old_x, old_y: /* mouse co-ordinates */
nt event_type: /* event type (keyboard, mouse, ...) */
nt ch: /* character typed */
char text[255]: /* char to write on the screen */
nt draw_type: /* indicate if clear, draw point, draw line etc */
nt info: /* the info dialog box number */

/* Text Style dialog box variables */
nt style: /* box number */

```

■ The good thing about C is that it hardly varies across a number of platforms. So if you get the hang of it on the ST, it's easy to translate your knowledge to IBM compatibles, even Amigas - if you have to.

Where do you go from here?

Good question. You've got used to the idea of programming, and found a language that's right for you and what you want to do. So far, the emphasis has been on carrying out small, specific tasks that generic packages like word processors and databases can't handle. But what happens when you get completely disheartened with your word processor? Could you really do any better?

A program to read in a key, store it and print it on screen would only be a few lines, as would the routine for a key. Wrapping whole words on to the next line is simple enough, and before you know it you've got a simple text editor. Programs you write like this tend to keep on growing, and before you know it you've written a full utility.

As long as you remember the basic rules of programming and exactly how to break down tasks, you can write any program for any application. Com-

bine a few hundred of the type of routine we looked earlier and you've got the crossword compiler I ripped the dictionary file from in the first place.

No matter what routines you write, you'll always be increasing your programming ability. And the more times you use a command, or track down a new one in a manual, or twist the usage of one command to meet a totally different purpose, the better you'll get at it.

If you do decide to take up programming as a serious hobby or even a full-time occupation, you won't be sorry. **ST FORMAT** buys home-made games from readers all the time for its Cover Disks, the shareware scheme can be very profitable and you can always release your work through the public domain scene. Failing that, sell it yourself - we'll always be delighted to give anyone a plug in Indies Corner, and you'd be contributing to the world of the ST in a big way. **stf**

Each version of BASIC is slightly different. Whereas there are accepted standards for every other language, BASIC slips about all over the shop, syntax and line structure changing from format to format.

GFA Basic

£50 GFA DATAMEDIA ST FORMAT BACK ISSUES (PAGE 85)

Probably the most comprehensive BASIC and as close to a standard as you can get, **GFA** covers the ability of every other language available. Free on issue 35's Cover Disk, it comes as an interpreter - a fast one at that. A compiler is available for a further £30, but if you're looking for speed you'd better get a completely different language anyway.

STF RATING: 91%

HiSoft Basic

£79.95 HISOFT 0525 718181

Ooh - it's absolutely enormous. Coming with a standard editor, a debugger, and fairly normal bunch of commands, this program can run programs written in other versions of BASIC without much hassle. It's also powerful enough to give BASIC the clout to run some serious applications and stand up for itself in a fight. This version of the language only really loses marks because of its complexity. Face facts, though - this package is nails.

STF RATING: 90%

STOS

£29.99 MANDARIN ST FORMAT BACK ISSUES (PAGE 85)

Throwing things like convention and form out of the window, **STOS Basic** doesn't work in quite the same way as other BASICs, casting aside boring or complex commands in favour of graphics and sound commands, that aid in the creation of simple games - the purpose of **STOS**. As far as BASIC applications are concerned, **STOS** isn't all that powerful, but if you want to write simple games it's definitely worth a look.

STF RATING: 85%



PURE GOLD

You've got a top-quality home computer. You've got great ideas. You want software that enables you to express yourself, but finding it isn't always easy. What you need are some *FORMAT* Golds. Trenton Webb and Simon Forrester go prospecting.

Every month *ST FORMAT* reviews and rates stacks of software. Some programs are complete dross, most of them are fairly average but there are a few special programs that really make the grade. The best of these are awarded the coveted title of *FORMAT* Gold.

For over five years now, *ST FORMAT* has been reporting on the ceaseless contest to produce software champions. Yet even if you've been reading the magazine avidly all this time (and if not, why not?) the endless procession of challengers, new superstars and defending champions gets a little confusing. Which is why we've compiled this conclusive list of which programs are fastest, strongest, and jump highest (he said, pushing the sporting metaphor a little too far).

This is the *ST FORMAT* parade of champions. Every *FORMAT* Gold medal winner ever is here to be compared and contrasted, and to compete against all its serious rivals. Help your *ST* to be a winner and give it the software it deserves.

What exactly makes a *FORMAT* Gold?

Being good isn't enough to earn a title a *FORMAT* Gold. *ST FORMAT* firmly believes that all software should be good, full stop. The fact a program doesn't bug out continually isn't going to gain it a Gold gong. To get that the program is going to have to be a little more than special.

It's often hard to identify exactly why program A is a Gold winner while program B – which does almost exactly the same job – isn't. Sadly brilliance isn't something you can write into a program, it's either there or it's not. Nobody sets out to write an average program, after all, it's just that most

software authors are closer to Jeffery Archer than F Scott Fitzgerald.

FORMAT Golds first and foremost do their job, and do it damn well, but there's more to it than that. To win a *FORMAT* Gold software has to satisfactorily meet the following criteria:

● **Presentation:** just as you can't judge a book by its cover, you can't judge a program by its interface. But the odds are that if the interface is clunky then there are likely to be some seriously dodgy elements within the code.

● **Power:** a good program does its job. A *FORMAT* Gold program does its job well. The difference in performance is subtle. The difference in results can be huge.

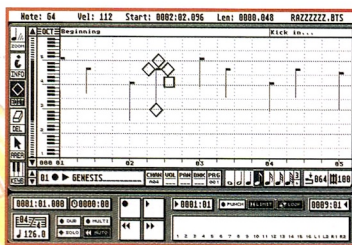
● **Programming:** *FORMAT* Golds don't have bugs in them. It really is that simple. You have to be able to rely on a *FORMAT* Gold, so that when you're wielding your data you know it's not going to fall over, crash the system, trash the hard drive, bite the cat in the head...

● **Style:** possibly the most difficult

element to capture – especially in more serious applications – but a *FORMAT* Gold has to have a certain flair. It not only has to do its job, but it has to look and feel the part as well. This doesn't mean it needs multi-coloured menus, just that some thought has been given to the poor user who is going to sit in front of the screen for the next five hours.

● **Attention to detail:** just as a program is bug-checked it should be sense-checked. Are all the dialog boxes really necessary? Are the features consistently named? Does the screen offer 'Information decrunching, please wait' or are you just presented with a blank screen? Literally being left in the dark (as far as the screen is concerned) is a bad sign.

● **Understanding:** many programs miss this simple point. While the purpose of the program



■ *Sequencer One*, now that's what I call *FORMAT* Gold volume 6. A 91 per cent music maestro.

is clear to the authors, many users don't appreciate the true nature of the software. Programmers have to get inside the users' heads and know what information they want/expect – as opposed to need. What makes sense to a highly able programmer may not be quite so obvious to the beginner.

● **Potential:** this is the real powerhouse of the *FORMAT* Gold. Unlike a good program, which enables you to do a job efficiently, a Gold

Music	Publisher	Issue	Score	Price
Alchimie Junior	PD	46	92	n/a
Band In A Box	Zone Distribution	29	94	£45.00
Breakthru	Gajits	47	90	£129.95
Creator v3.1	Sound Tech	20	92	£299.00
Cubase	Harman	2	91	£575.00
Cubase Audio	Harman	56	94	£700.00
Datafile 3 CD	Time & Space	40	94	£49.95
Digit	CGS Computerbild	52	91	£29.95
Genwave	Interval Music	7	90	£199.00
KCS Omega	Zone Distribution	39	90	STF Cover Disk 54
MIDIStudio Master	Ladbroke Computing	30	91	£99.99
MUSICAL	Evenlode	11	90	£29.95
Notator	Sound Tech	30	92	£515.00
Notator Logic	Sound	51	91	£499.00
Notator SL	Sound Tech	39	90	£550.00
Pro Series 16-bit Samp	AVR	25	94	£350.00
Prodigy	Digital Muse	8	92	£129.95
Quartet	Microdeal	5	94	£49.95
Replay 16	Microdeal	39	92	£129.95
Replay 8	Microdeal	18	95	£79.95
Replay Pro	Microdeal	6	90	£129.95
Sequencer One	Gajits	8	91	£79.00
SY-35 Synth (Keyboard)	Yamaha	41	93	£599.00
TCB Tracker	MPH Software	16	93	£39.95
Tiger Cub	MCM	10	91	£99.00
Trackman 2	Hollis	22	97	£179.00
X-Static CD	Time & Space	40	92	£79.00

has to give you the power to go beyond the immediate task at hand. It should be the starting point. If the program's got the elements outlined above, you are going to want to use it. If you use it you're going to learn how to make it do what you exactly what you want. And it's then that you can really start computing!

And that's it! If the program or piece of hardware can match these criteria then it's in the running for a **FORMAT Gold**, although it doesn't guarantee it – as there's always something a little hard to define about quality software, where the total achievement exceeds the sum of the constituent parts. And that's just what all the programs and pieces of kit over the following eight pages have managed. We line up the very best the Atari world has to offer and let it all fight it out for supremacy. Let the games begin!

MUSIC

The ST is the music computer. If you're working in professional studio or playing around with sounds in your study it is the most versatile machine imaginable for turning a dreadful din into beautiful music.

The ST doesn't play at music like other computers. It can manipulate sound to professional quality and as a result is partially responsible for the upsurge in 'home-grown' music of the past few years. The ST's partner in this crime is its excellent software collection. From PD to professional every angle is covered at every price.

The undisputed heavyweight champion of the music arena is *Cubase*, the first musical **FORMAT Gold** and still the best. There is one slight drawback, which is the reason it didn't dominate the MIDI sequencer market before everybody else got started – its price.

The original *Cubase* weighed in at £500 and the new and spunky *Cubase Audio* boasted the even more impressive price tag of £700. Mind you, if you're serious about music and have a 14Mbyte Falcon030, huge hard drive and MIDI keyboard...

If you fancy something a little cheaper there are two **FORMAT Gold** winning packages available with back issues of *STF*. There's the tracker, *Quartet* (STF 58), and the Keyboard Controlled Sequencer *KCS Omega* (STF 54). See page 85 for full details on how to get hold of a copy.

Music is about expression. If a music program enables you to do that it's well on the way to a **FORMAT Gold**. If it makes relatively complex concepts easy to control (if not exactly understand) then that's another step in the right direction. If it can make topics like

But what came first?

The first **FORMAT Gold** (hushed silence) in strictly alphabetical order and working from the front of the magazine towards the back was... *Bloodwych*. A two-player RPG, it scored a massive 95%. And Trenton hates it with a near religious passion. Just thought you'd like to know.

MIDI, musical notation or waveform dynamics clear to the beginner then it really starts to 'push the envelope' – as postmen are fond of saying – of **FORMAT Golds**.

Software tools are important to ST musicians, as are the results. Clear qualitative verdicts can be made quickly and easily. It's either stereo or mono, analog or digital, clear or crackly! With varied tools and quality output **FORMAT Gold** music software enables you to produce and master your own music well. That doesn't necessarily mean it'll be good music though...

UTILITIES AND BOOKS

Utilities

Utilities. It's an ugly title, and not even a particularly descriptive one, but can you come up with a better catch-all name for everything from *Neodesk 3* through to *3D Construction Kit*?

These programs are the ones that don't fit any of the predefined

categories like 'art' or 'DTP'. To shine these 'utilities' have to enable you to achieve. What they enable you to achieve is another matter, but the point is that they liberate. Now all our Gold stars are neat ideas that have sprung from a need, desire or dream of what a computer should actually be able to do.

Trip-A-Tron, for example, has no useful purpose whatsoever, all it can do is display a series of pretty light, which you control. Pointless but fun, it's well implemented and eminently good fun in a dark room (but then so are quite a few things).

Ultimate Virus Killer v6, on the other hand, doesn't look sexy but is

massively helpful, fending off the work of the mindless computer vandals. *UVK* does its job, catches all currently known nasties and keeps your data safe and sound. Ideal. **FORMAT Gold** me up.

MagiC and *Geneva* get their awards for having the courage to usurp the Atari Operating System and replace it with their own gorgeously huggable multitasking systems. This is the **FORMAT Gold** spirit – imagination and quality combined in a single piece of code. And with *MagiC* boasting a further

two programs to form a Desktop suite (*Kobold* is a **FORMAT Gold** in its own right and *Ease* looks good too) they have successfully gone beyond the bounds of normal 'one operation' programs. All the utility **FORMAT Golds** make a good machine better. They add the extra ele-

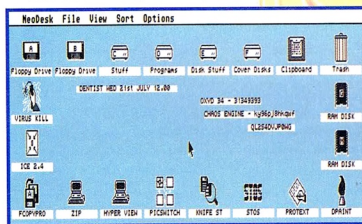
ment that, after a few years' use, you find yourself yearning for.

Diamond Back 3 (and to a lesser extent *Diamond Back 2*) gives you total data safety by offering a vast range of potent hard drive tools. *SpeedoGDOS*, meanwhile, gives your ST the ability to produce hypersmooth on-screen and printing fonts, and in doing so has finally unleashed the ST's DTP potential, which was previously obvious but hard to tap.

If you want to set your system free these are the programs you should be looking at. They're as good as any you can find on any format – if not better. Try them, you won't be disappointed.

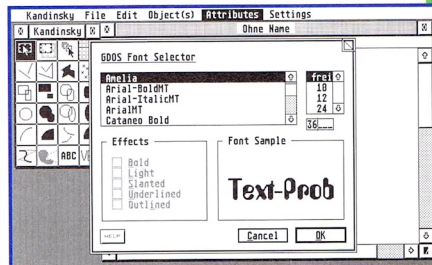
How many?

ST FORMAT has reviewed nearly 2,000 ST programs and bits of kit over the years. Of these a mere 262 have won **FORMAT Golds** – which isn't many. The fewest have gone to floppy drives – one to be precise – and the most have gone to games – a surprisingly small 106. All in all that's an amazing 23,580%!



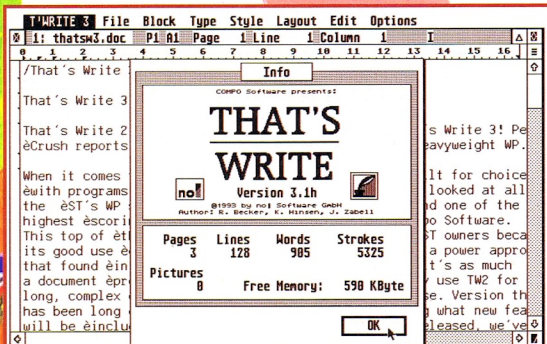
■ *Neodesk* – a program that had the nerve to oust GEM in favour of an even more powerful program.

Utilities	Publisher	Issue	Score	Price
Astrobase	Magic Space	35	90	£100.00
Astronomy Lab	FaST Club	9	90	£19.95
Diamond Back 3	HiSoft	61	95	£49.95
Diamond Back 2	HiSoft	37	92	£39.95
Diamond Edge	HiSoft	45	90	£49.99
Fast Copy Pro v.3	FaST Club	62	90	£14.95
Font Editor	Signa	6	90	n/a
Fontkit 3	FaST Club	20	90	£19.95
Geneva	Compo	55	93	£59.00
Harlekin 2	HiSoft	27	92	£59.95
Harlekin 3.1	HiSoft	57	94	£59.95
HPChrome	Caledonia PDL	38	90	£2.50
Kobold	System Sol	61	90	£59.95
MagiC	System Sol	60	94	£69.95
Mouse tricks 2	J Lawrence	34	90	£10.00
MultiPrint	FaST Club	40	90	£9.95
Neodesk 3	Compo	18	94	£39.95
SpeedoGDOS	HiSoft	50	92	£39.95
Trip-A-Tron	Llamosoft	24	91	£34.95
Universal Item	FaST Club	34	90	£14.95
UVK v6	STF Mail Order	57	92	£9.95
X-Boot 3	HiSoft	45	92	£34.95
3D Construction Kit	Domark	24	95	£49.99
3D Construction Kit 2	Domark	46	90	£49.99



■ **FORMAT Golds** are good ideas implemented well. *GDOS* is a fine example. Finally smooth fonts are available on the ST.

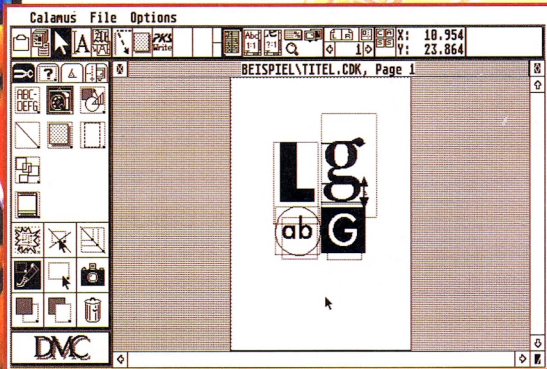
■ The *That's Write* family have a host of *FORMAT* Golds on their mantelpiece. Even under their Granny's maiden name (*Write On*) they got a gong!



WORD PROCESSORS AND DESKTOP PUBLISHERS

One of the more worthy applications to which you can put your ST is text and document processing. Over recent ST times, we've seen enough packages to not only enable you to write what you want

with minimal fuss, but also to help you lay them out on a page, using boxes, pictures, headlines, diagrams, interesting text flows, and everything else you'd find in the most complex of magazines.



■ Calamus bought you the concept of vector fonts in a desktop publishing package. It won a *FORMAT* Gold for innovation as well as slick coding.

TOP TEN TURKEYS

Yup - we're sitting around speculating on the best ST games, utilities and hardware, but there have been some serious turkeys as well, and it seems only fair to mention them.

Strangely (no sarcasm intended), there haven't been any serious utilities scoring under 30% in the entire history of *STF*. Therefore, although this is an exhaustive list of the ten worst releases of any kind, all ten are games. Bad luck. Real bad luck.

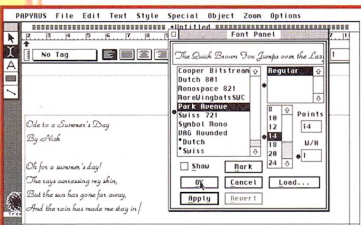
Game	Issue	Score
Prosoccer 2190	17	12
Starwreck	7	15
Treble Champions	14	19
Warp	7	20
Wildlife	14	21
Moonfall	29	24
Dick Tracey	20	25
Indiana Jones Last Crusade	29	26
Dr Doom's Revenge	8	29
Soccer Glory	11	29

Word Processors	Publisher	Issue	Score	Price
DB Writer	PD	46	91	n/a
Papyrus Gold	HiSoft	63	91	£129.95
Protext 5.5	Arnor	28	95	£152.75
Protext 5.53	Arnor	36	93	£152.75
Protext 6	Arnor	54	92	£152.75
Redacteur 3	ST Club	34	90	£119.00
ST Word Writer	GST	22	91	£49.95
That's Write 2	Compo	45	90	£129.00
That's Write 3	Compo	63	91	£129.00
Write On	Compo	22	90	£49.95

DTP	Publisher	Issue	Score	Price
Calamus	Signa	6	90	£59.00
Calamus S	Malco	46	91	£334.88
Easy Text Vector Pro	zzSoft	55	91	£39.95
Easy Text Pro	zzSoft	47	90	£39.95
Pagestream 2	Silica	36	94	£199.95
Pagestream V2.2	Silica	41	91	£169.00
Proxima	Network News	6	96	£155.00

Before venturing any further with word processors, check out the rest of this issue - we don't think there's much point in tracking down the ultimate all-time winners when pages 30, 36 and 46 contain all the information you could need.

DTP packages, however, are a different matter altogether. On the basis of final ratings, the all-time DTP package should be *Proxima*, scoring an all-time 96% way back in issue 6. However, things



■ *Papyrus Gold*. The big fight for supremacy in the document processing market makes some programs work that much harder, and as a result, better.

change, and more recently we've seen the likes of *Pagestream 2*, a package worth considering for its advanced page handling facilities, and its far superior text-handling.

THE BEST - FOR FREE!

Over the last two years we've seen some of the most original, exciting and innovative PD releases the ST's ever had.

Game	Issue	Score
Biohazard	55	91
A game so excellent it made last month's subscribers' disk (and something tells us that won't be the last we see of it). It doesn't really need a rating - you can look for yourself.		
Dave Munsie Game Collection 1	57	92
A selection of those classic games we all love to hate and hate to play. Only kidding - a set of faithful representations of the old classics.		
Endurance	57	90
3DCK magic with a well-written plot, well-designed sections, and smooth gameplay. Damned spooky as well.		
GEM-View 3.02	58	93
It's hard to believe there's an ST anywhere without a copy of <i>GEM-View</i> . More than any other program, it should come in the box with the machine itself - the ultimate tool for all your image format needs.		
Grandad 2: In Search Of Sandwiches	51	90
Wrinkled antics with a hyperactive OAP on a quest for munchies. Yes.		
Kozmic 4	54	90
Journeying to the farthest reaches of odd, <i>Kozmic 4</i> is an image processing package devoted entirely to weird effects, giving you a definite edge in freaky out your mates.		
Oxyd	45	92
Reviewed also on the Falcon last issue, <i>Oxyd</i> had to be second to <i>Starball</i> in the run of the best PD games ever - it's a little more passive puzzle game, relying on brain-power more than reflexes, but it's one of the most beautifully designed puzzle games we've seen in a long time.		
POV Raytrace	48	90
It's a raytracing package - why else do you think it's included here?		
ST Zip	57	90
The standard in ST compression, helping not only users but librarians, who've been using it to cram more and more on to their disks with it since time began. Or possibly even before.		
Starball	63	95
What can we say? It's reviewed this issue, and it's a must. If you don't have <i>Starball</i> for your ST, you probably haven't got any mates either.		

ART AND EDUCATION

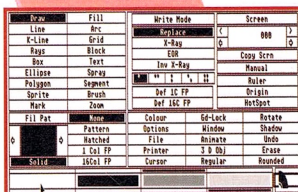
Art

Now here is where things get really complex – art packages come and art packages go, but there are few that take advantage of every angle of art on an ST. For instance, there are some packages (like *Degas*) that approach drawing from a freehand angle, and others (like *DPaint*) that approach the whole idea of art from a slightly more structured, formulated view.

In the end, the advantages and disadvantages of each package merge, because an art package has to have a fairly even spread of advanced facilities to win a *FORMAT Gold*. If you want to go into the relative uses of each one you'd better start buying back issues (we're not going to give you a full review of each), but there are a few basic arty factors that dictate whether or not a package is likely to take the Gold:

● **Drawing tools:** they're wonderful things, and any art package worth its salt would give you a spray can, polygon facilities, patterned fills and ellipses.

● **Cut and Paste:** the ability to cut and paste chunks of your images intelligently is obviously important



■ **Canvas, one of the oldies, but a classic FORMAT Goldies. It was so good we just had to put it on a Cover Disk.**



to the artist. If you can't actually carry this operation out, you can knock 20% off the score immediately.

● **Image formats:** if your art package can't handle at least five different file formats, give up and go home. No – go on. No, really. I mean it. It's just no use.

Education

Education is a difficult field to program in – making a conscious decision to aim your software at people who're actually supposed to be utterly inept is a scary step indeed.

To create a Gold-rated education package is something more than a feat, then, because you not only

Education

Education	Publisher	Issue	Score	Price
ADI French	Europress	44	92	£25.99
First Type	Hat	14	93	£12.95
Fun School 3	Database	30	91	£19.95
Fun School 4	Europress	31	91	£24.99
Henrietta's Bk O Spells	Scetlander	28	92	£24.99
Kidpublisher Pro	DA Brumleve	11	95	n/a
Learn To Read	Prisma	12	93	£29.99
Learn To Type	Hat	14	93	£14.95
Let's Spell First	Squirrel	44	91	£10.00
Let's Spell Out	Softstuff	24	91	£14.99
Maths Balster	Abiac	26	91	£34.95
Noddy's Playtime	Jumping Bean	43	90	£24.99



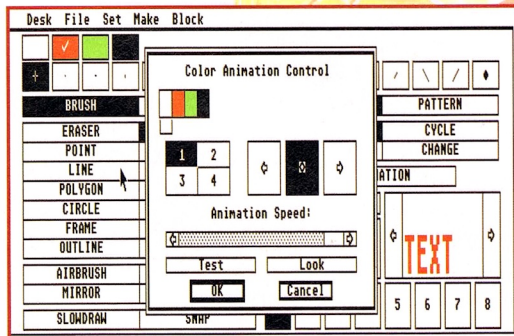
■ **Education is an area where computers should excel. Yet few programs have shone. ADI French is one of the few.**

ALMOST THERE!

There comes a time in the life of every computer when we have to take a minute of silence to acknowledge those that didn't quite make it – the 89'ers. Here then, is the tribute to all those that died in the Great Software Race, the unmarked graves:

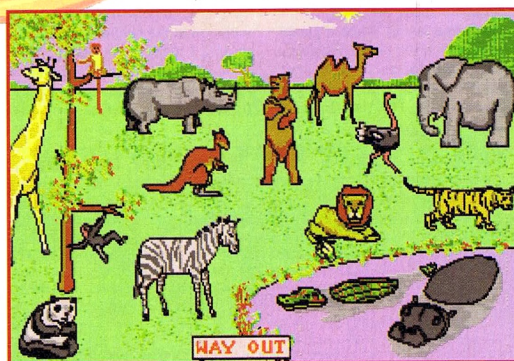
Software	Type	Issue
Breakthru 2.01	MUS	57
Calamus SL	DTP	37
Cubeat	MUS	30
DB Writer	WP	59
First Paint	EDU	14
Harlekin	PRG	12
NVDI	PRG	37
Reading Packs 1&2	EDU	23
Regent Word 2	WP	3
Stalker 3	UTIL	46
Super Card 2	BUS	46
Trimfont	PRG	35
XOR	MUS	5

Any educational package you see featured on this page is definitely worth buying – no one gets a Gold without understanding exactly what makes education valuable, and exactly what makes a program usable. Whether or not the programs will be suitable for you is another matter – this depends largely on each your needs.



■ **Degas. Everybody has Degas. Even people without STs have Degas, which is just as well because it's excellent. One of the ST's original heroes.**

Art	Publisher	Issue	Score	Price
Canvas	Microdeal	9	94	£14.95
Chagall	CGS	57	94	£199.00
Crack Art	Shareware	61	94	n/a
DA's Picture	CGS	58	91	£149.00
DA's Vector	CGS	48	92	£150.00
DA's Vector Pro	CGS	60	90	£249.00
Degas Elite	EA	30	90	£24.95
Deluxe Paint	EA	15	92	£49.95
Imagecopy 2	FaST Club	49	93	£19.95
Imagecopy 3	FaST Club	62	92	£29.95
MegaPaint 2	Silica	14	93	£99.95
MegaPaint 2	Silica	34	93	£99.95
Outline Art	Signa	6	95	£172.50
PAD	Shareware	61	90	n/a
Xenomorf	16/32	47	93	£79.00
Xenomorf 2	16/32	62	94	£129.00

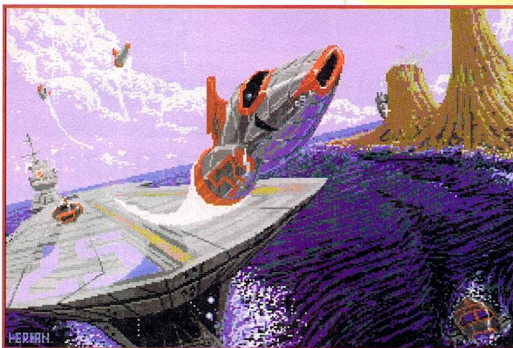


■ **Let's Spell. A great idea and a great educational package. It teaches spsrgs how to spell by being fun! Now steady on there. Learning! Fun!**

GAMES

The history of the top games on the ST is a complex one, starting with what was the first *FORMAT* Gold after *STF*'s solo launch – *Bloodwych* (half the crowd groans, half the crowd cheers). There have been many more games since, some of the most memorable deserving their award for more than originality. What makes a golden game?

● **Gameplay:** the point of all games, at the end of the day, is to have fun. Occasionally, you'll run across a game where, even if you die unfairly, you'll be grinning. And when you do find a game that's just pure fun from start to finish, you're getting close to a *FORMAT* Gold.



■ Ricardo Pinto's classic *Carrier Command*. Big-style 3D warfare on a truly big stage for the first time. Fight on land, sea and air. Shame about the real time problem (it took ages to get anywhere), but a true Gold all the same.

● **Presentation:** it comes down to more than just the quality of the graphics and sound. Presentation includes things as simple as screen layout, how many title screens you have to wade through, whether the score gets in the way, and all the other little touches.

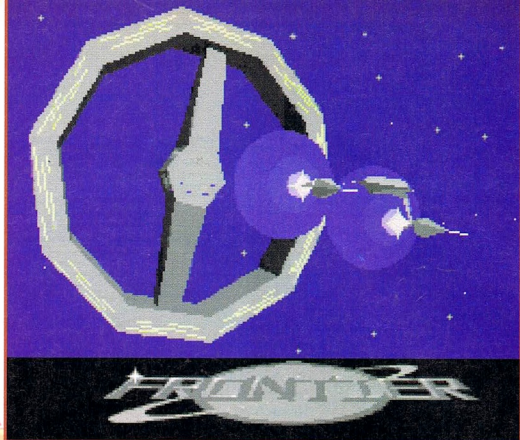
● **Level design:** this is where innovation really helps a game. Novel game layout keeps a player interested – when you're playing a game purely to see what devious puzzle is coming next, you know you're playing a *FORMAT* Gold.

So which games really managed to meet all these criteria? From the collection of Gold-rated games we've seen over the years, which left more than their mark?

Carrier Command

Though not the most furiously-paced war simulation around, *Carrier Command* has many strengths. Taking place in a standard island war scenario, you're placed in control of a carrier, and the various land, air and sea craft it holds.

What makes *Carrier Command* so special is that everything's smooth – flight is easy, targeting is simple, and weaponry doesn't have to be carefully set up. All you have to do is concentrate on your fancy tricks and strategic traps, giving the game a pure



■ *Frontier: Elite 2*. It was a game. It was a sequel. It was quite good. A lot of people bought it. Most of them liked it. Have a *FORMAT* Gold then, if you must.

really makes *Frontier* a classic Gold (even though its presentation leaves a little to be desired) is that it's a completely flexible system – you do exactly what you want, when you want, without for example stating you want to be a miner. This is the element that makes *Frontier* a real winner.

Lemmings

Hailed as the all-time classic puzzle game by people who're bored silly

with *Tetris*, *Lemmings* is a must for anyone. The game revolves around a group of little dudes, dropping into a platform world, and being set to various tasks (digging, climbing, building bridges) to get themselves out again. The concept is brilliantly simple, and the gameplay is just brilliant.

Populous 2

Another all-time classic for a good reason – the original *Populous*

theme, without the hassle of technical gameplay. This is the element that makes *Carrier Command* a Gold winner.

Frontier

The sequel to David Braben's classic *Elite* must be played if not owned. The game takes place across a galaxy (ours, actually), with you in the ship of your choice, making a living from trading, deliveries, bounty hunting, or one of many other occupations you can try your hand at. The thing that



■ *Lemmings 2*. This followed *Lemmings* which was also rather wonderful. A sequel that surpassed everyone's expectations. The best game ever?

THE ODDEST EVER GOLD WINNER

Every program mentioned in this feature is worthy of *FORMAT* Gold – that's why they're all here. Occasionally, though, a program comes along that wins the hearts and minds of those who use it, not only because of its presentation, usefulness and initial concept, but also because of its weirdness – Jeff Minter's *Trip-a-tron*.

Trip-a-tron is a program designed to generate complex patterns of light on screen. That's it. Being by Jeff Minter, though, things don't end there. Sequencing these light patterns involves more than entering a random number seed (which

previous sound-to-light and pattern programs relied on). Sitting behind the pretty patterns you'll also find a series of frame sequencers, waveform defining packages, and fairly complex maths processors, all of which come together to give you the ultimate facility for creating, erm, weird animations and things.

Trip-a-tron has to win the 'Weirdest *FORMAT* Gold Ever' award, because it's exactly that – nothing's ever come along that's gone into more scientific depth about trippy visual patterns, and nothing ever will.

caused a stir because of its completely new style of gameplay, and *Populous 2* kept things stirring by improving on the original game. The idea consists of an isometric landscape across which is scattered your group of people who're building, breeding, and fighting according to your instructions (you playing God). Essentially, the aim of the game is to conquer the people of a distant land, racing against them to build the strongest army. It's never been done before, and

when Bullfrog (the team behind the game) did it, they took the Gold with ease.

Robocop 3

When the original *Robocop* first came out, the world and his ST went wild for it. It took the form of the big metal bloke walking through a warehouse or down a street butchering hundreds of bad guys with a big meaty gun.

Robocop 3 follows the theme of bloodlust by giving you the deaths you want, while adding elements of more complex gameplay, as well as a stunning 3D section.

Secret Of Monkey Island

Animated adventure antics across an ancient area, starring Guybrush Threepwood (a pirate wannabe), and a full cast

of sea-dogs, hearties, and landlubbers. The interface is probably the most innovative part of the game, being a cross between a point-and-click icon adventure and a text-based system. Some nice touches include a great duelling sequence, which is based entirely on hurling insults, and the pirates, who really should have their own TV show. Innovation, originality, an excellent plot and humour to boot – Gold, me hearties. Gold!

Sensible Soccer

It's *Sensible Bloody Soccer*, isn't it – is there really any need to ask why it's included here?

Sim City

Being Lord Mayor of a town is fun. Stuffing an island full of factories while completely ignoring roads, bridges, electricity or houses is fun. Giving your people hurricanes, floods, fires, plane crashes and finally Armageddon is a laugh. *Sim City* was the first game of its kind, and it'll always remain a classic.

Speedball 2

Classic Bitmap Brothers gameplay in a futuristic blood sport, which involves 22 armoured men drawing as much blood as possible, and scoring extra points for disabling the opposing team.

Speedball 2 (and its prequel) won high marks by appealing to the basic violent nature inherent in all of us. Especially Trent.



■ Bullfrog invented a whole new genre when they created *Populous*. Can you imagine a world without god games? Well everyone did until the Frogs had their *FORMAT* Gold idea.

Spindizzy Worlds

First, there was *Spindizzy*, chronicling the adventures of a droid collecting diamonds around a puzzling isometric world. *Worlds* came along, and blew the original away with new puzzles, new problems and new stunts to try. *Worlds* won the Gold not only for gameplay but for the excellent interpretation and improvement on the original.



■ Nasty, mean, moody, and downright vicious. Give this game a *FORMAT* Gold before it hurts somebody. *Speedball 2* was a real joystick killer.

Game	Publisher	Issue	Score
Another World	US Gold/Hit Squad	33/57	93
Archer MacClean's Pool	Virgin	43	95
Armada	Arc	10	91
Armour-Geddon	Psychosis	26	91
Austerlitz	Mirrorsoft	8	92
Award Winners	Empire	36	90
BAT	UBI Soft	17	92
BAT 2	UBI Soft	43	91
Batman	Ocean	6	91
Battle Command	Psychosis	19	93
Blood Money	Psychosis	2	90
Bloodwych	Mirrorsoft	1	95
Blue Lightning	Atari	41	94
Captive	Mindscape	16	93
Carrier Command	Mirror Image	23	91
Castle Master	Domark	10	90
Chess Engine	Renegade	48	94
Civilization	MicroProse	46	92
Conqueror	Rainbow Arts	9	91
Cybercon 3	US Gold	22	91
Damocles	Novagen	13	94
Damocles Missions	Novagen	31	94
Dragon's Breath	Palace	10	92
Driller	Kixx	22	91
Dungeon Master	Mirrorsoft	31	92
Dungeon Master Doub Pk	Psychosis	42	92
Dynablaster	UBI Soft	43	92
Elvira 2	Accolade	40	91
Enchanted Lands	Thalion	20	92
Epic	Ocean	37	91
Exile	Audiogenic	28	92
F-15 Strike Eagle	MicroProse	26	90
F-19 Stealth Fighter	MicroProse	12	96
Flames Of Freedom	Rainbird	26	92
Flight Of The Intruder	Mirrorsoft	27	92
Frontier: Elite 2	Gametek	55	91
Gettysburg	Atari	17	93
Gods	Renegade	22	92
Gravity	Imageworks	8	93
Greatest, The	Beau Jolly	46	91
Hostages	Action 16	20	90
Hound Of Shadow	EA	5	90
Hunter	Activision	26	92
Int Sensible Soccer	Renegade	61	91
Interphase	Imageworks	4	93
Iron Lord	UBI Soft	7	90
Ishar	Daze	37	90
Ishar 2	Daze	49	92
Ishar 2 (Falcon)	Daze	52	90
Jimmy White's Snooker	Virgin	27	94
Killing Cloud	Imageworks	22	93
Killing Game Show	Psychosis	23	90
Knights Of The Sky	MicroProse	34	91
Legend Of Faerghall	Rainbow Arts	17	90
Lemmings	Psychosis	24	94
Lemmings 2	Psychosis	49	92
Llamatron	Llamasoft	31	95
Llamapong	Atari	51	91
Lotus Trilogy	Gremlin	58	91
Lure Of The Temptress	Virgin/Hit Squad	35/58	90
Magic Fly	EA	14	91
Magic Pockets	Renegade	27	90
Magic Worlds	Daze	41	91
Mega Lo Mania	Imageworks	27	94
MicroProse Golf	MicroProse	27	95
Midwinter	MicroProse	9	96
MIG 29 Fulcrum	Domark	20	92
Onslaught	Hewson	5	90
Operation Stealth	US Gold	15	93
Pacific Islands	Empire	35	90
Parasol Stars	Ocean/Hit Squad	37/54	93
Player Manager	Anco	11	93
Populous 2	EA	19	93
Prince Of Persia	Domark	19	90
Projectyle	EA	12	91
Pushover	Ocean	39	92
Railroad Tycoon	MicroProse	28	93
Rainbow Islands	Ocean	9	93
Rick Dangerous	Kixx	34	90
Robocop 3	Ocean	34	94
Secret Of Monkey Island	US Gold/Kixx XL	23/51	94
Sensible Soccer	Renegade	39	91
Sim City	Infogrames	12	92
Sleepwalker	Ocean	47	92
Speedball 2	Kixx XL	54	94
Spindizzy Worlds	Activision	17	91
Streetfighter 2	US Gold/Kixx XL	44/53	90
Strider	US Gold	3	92
Supremacy	Virgin	18	90
Their Finest Hour	US Gold	15	91
Thunderhawk AH-73M	Core Design	28	91
Toki (Lynx)	Atari	40	92
Tower Of Babel	MicroProse	5	94
Utopia	Gremlin	29	90
Vroom	UBI Soft	29	92
War In The Gulf	Empire	49	92
Waterloo	Activision	11	90
Wayne Gretzky	Mirrorsoft	1	91
Wizkid	Ocean/Hit Squad	37/57	91
World Class Rugby	Audiogenic	53	90
Xenon 2	Mirrorsoft/Kixx XL	3/54	90

HARDWARE AND BUSINESS

Hardware

Despite featuring some of the most pricey items ever reviewed by *ST FORMAT*, hardware is (oddly) one of the easiest categories to judge for *FORMAT* Golds. For starters it either works or it doesn't. Then there's build quality – if the kit falls apart after a few days it isn't going to get a *FORMAT* Gold. And after that there are all manner of good physical tests that you can do with the stuff.

That doesn't mean *FORMAT* Golds are easily won – it's shocking how much kit we get in the office that ain't up to the job – but it does mean we get to do destruction tests at least once a month.

lem'. The Gravis Mousestick is effectively a mouse that works like a joystick. Using proportional movement rather than a basic eight-way switching system the Gravis enables precise, pre-calibrated movements in any game that can utilise a mouse – for example, MicroProse flight sims.

The Bollistick isn't a joystick as its name suggests, but is in fact a joypad. Plugging into the normal joystick port this device offers no great advance in technology but follows the logic that 'console joypads are comfy and easy to use so why not make one that's ST-compatible'. Although you could always just nick your cousin's Sega

Printers	Manufacturer	Issue	Score	Price
BJ-10e	Canon	17	90	£352.00
Canon BJ-200	Canon	46	92	£468.83
HP DeskJet 500	Hewlett Packard	20	90	£499.00
HP DeskJet 560C	Hewlett Packard	60	91	£440.00
HP DeskJet 510	Hewlett Packard	51	91	£329.00
HP LaserJet 4	Hewlett Packard	43	90	£1,937.58
HP LaserJet 4L	Hewlett Packard	55	90	£762.58
KX-P1123	Panasonic	25	90	£282.00
LaserJet 3P	Hewlett Packard	25	91	£1,174.00
Rioch LP 1200	Silica	43	90	£821.33
Star Laser Printer	Star	39	93	£1,644.00
Star LC-100	Star	51	90	£222.08
Star SJ-48	Star	43	90	£351.33

what you want/need to print there is a range of laserjets, bubble jets, and postscript printers to choose from. The more dosh you fork out, the more features the machine will have, the more flexible the hardware will be and the faster it will print. All of those recommended above are hard-core winners and the only way for you to choose between them is really a matter of price and performance. NB: It pays to be honest with yourself when choosing a printer. It's tempting to go for the highest end machine you can, but do you really need a machine that can print to 400dpi? If you don't you could save yourself an awful lot of cash.

forbid) the right fuse. The data cable is long, there's a whizzy little LED light to show when it's accessing and the eject button positively forces the disk into your hand. Oh and it reads disks well too. Very good. Top of the Class. Next.

RAM Upgrades

Send more brains! Well send more memory actually, but that comes in brains generally. Sorry, gratuitous *Return Of The Living Dead* quote. You want more RAM in your machine – it is in fact, impossible to have enough.

The simple answer to this problem is to slap some more in. This is easily achieved with these two rather splendid upgrades. The Power 2MByte had the field to itself for a while – it was easy to install, could be expanded again later from

Floppy Drives	Manufacturer	Issue	Score	Price
CSA 354	Cumana	28	90	£59.99

Floppy Drive(s)

External floppy drives are good things. When using an intelligently-written program – a *FORMAT* Gold for instance – you expect it to have a look around your system and, if it finds a second drive, to use it. This cuts down disk swapping (and more importantly disk wear) and keeps the hassle factor down.

2 to 4MByte and it weighed in at a blindingly low price. Only when the ExtraRAM popped along was its position threatened – and then only a bit. The ExtraRAM enables your ST to run with a stonking 8MByte of RAM. You do need TOS 2.06 and 4MByte of RAM already in your machine but if you have... It's easy to fit and is massively compatible.

Hard Drives	Manufacturer	Issue	Score	Price
Gasteiner SCSI Drive	Gasteiner	61	91	£259/299
MiniS	System Solutions	55	93	from £299
Power Drive 900	Power	17	92	from £299
Power Rewritable	Power	17	93	£3,200
Progate 2 8SDC	Analogic	55	91	£299
Protar 40DC	Protar	27	90	from £280
Vortex Datajet	Silica	17	94	from £499

Hard Drives

Now we've only ever recommended one floppy drive for a *FORMAT* Gold, but why? Well it's like this. The Cumana CSA 354 is a rugged little beast, the kind of thing tanks could run over on their way to Chinese student demonstrations and it would still work. Simple elements like matching the colour of your ST have been taken into account. It comes with a long power lead, fitted plug and (gawd

Now this is an odd little tale. Hard drives have evolved. Back in the distant mists of time (*STF* 17) hard drive were huge things that thought they were being flash when they announced that they could hold 50MBytes of data. Since then the unstoppable advance of technology means that hard drives have got physically smaller, their storage capacity much larger, and

Scanner	Manufacturer	Issue	Score	Price
Alfadata Hand Scanner	Gasteiner	47	90	£119.95
Datascan A4 Pro	Pandaal	23	96	£399.95
Datascan Pro	Pandaal	15	93	£199.95
Golden Image Hand	Ladbroke	44	90	£119.95
Naksha Hand Scanner	Naksha	44	91	£116.33
Power Scanner	Power Computing	44	90	£99.00

Scanners

Superlatively sharp images. That's what you want from your scanner and that's what all of the above can offer. Obviously they offer different quality at different prices, but for the money each one will pep up your desktop publishing or artwork massively.

Hand scanners are useful for small, mono work. They're flexible and highly cost-effective, if a little tricky to use at first. Of the *FORMAT* Golds, the Naksha and Golden Image Hand scanners are the tops simply because they process pictures well and both come with loads of complementary software like *Touch-Up* and *Deluxe Paint*. The Alfadata is the rival to come close – this time offering *Merge* it along with *Touch Up* to form a pokey little combo.

Controllers

We've all got mice. We've all got joysticks. So why do we need another form of controller? Folk have been trying to re-invent the wheel on the ST for years, producing ever more wackily designed joysticks and oddities like optical mice. Few of them have been worth the effort and none have been earth-shattering.

Three controllers stand out from the crowd though, and these are all devices that have taken a more lateral approach to the 'prob-

Mega Drive pad and use that instead. If you're desperate.

The Alfa Data is a trackball. Some people get on with these, while others would rather insert small wooden spikes into their own eyes than touch one. Effectively an upside-down mouse, you move the ball and press the sides to click. That's it. It works well, if you're not a spikes man.

Printers

Printers are an odd category. As most are made by hyper-national corporations few are really poor. Furthermore, most do the job to such a high standard that sorting the wheat from the chaff is nigh on impossible – but we've done it. The ones shown here are head and shoulders above the competition.

Ask any computer journalist to recommend a printer for a system they don't know and they'll look panicked for a while and then mention a Star 9-pin. Why? Because for time immemorial the Star 9-pin range has proved to be the most robust and reliable known to man. Sure the results aren't as hot as some of the laserjets but a) it's dead cheap, b) they're easy to use and c) they do a fine job. The Star LC-100 is ST's variant. The same holds true. Buy one.

Once you go beyond the 9-pin front the prices and quality escalate in parallel. Depending on

Controllers	Manufacturer	Issue	Score	Price
Alfa Data	Gasteiner	34	92	£34.95
Bollistick	Cheetah	44	90	£9.99
Gravis Mousestick	RC Sims	24	90	£69.00

RAM Upgrades	Manufacturer	Issue	Score	Price
ExtraRAM +8	Marpet	57	92	from £60
Power 2MByte	Power	25	92	£99

antaSTic prices

Fast-response Mailorder
10am-8pm Monday to Friday
10am-4pm Saturday
 Always a person - never an answerphone!



Games Centre
10am-8pm Monday to Friday
10am-4pm Saturday
 2 minutes from Old St. Tube station, take exit 2

Games

3D CONSTRUCTION KIT 2	39.95
3D POOL	8.75
ADAMS FAMILY	8.75
ADI MATHS (13-14)	21.95
ANCIENT ART OF WAR IN THE SKIES	29.45
ANOTHER WORLD	14.95
APOLCALYPSE	21.95
ARCHER MACLEANS POOL	11.40
B-17 FLYING FORTRESS	29.45
BATMAN RETURNS	20.95
BATTLEHAWKS 1942	12.95
BETTER MATHS II (12-13)	14.95
BULLYS SPORTING DARTS (11M)	28.50
BUMPER QUAD PACK	9.95
CADEAU + THE PAYOFF	12.95
CALIFORNIA GAMES II	8.75
CAMPAIN	24.95
CAMPAIN MISSION DISKS	13.95
CANNON FODDER	6.96
CARTON DYNAMO	20.95
CARTOON - DOUBLE PACK	14.90
CARTOON COLLECTION	20.95
CHAMPIONSHIP MGR '94 Season Disk	23.50
CHAMPIONSHIP MGR COMPENDIUM	8.75
CHAMPIONSHIP MGR END OF Season Data	13.95
CHOS ENGINE (11M)	21.95
CHASE HQ II	8.75
CIVILIZATION (11M)	29.45
COLONEL'S BEQUEST (11M)	12.95
CONQUEROR	6.96
COUL DUCKULA	6.96
CREATURES	6.96
CRIME CITY	6.96
CROSSBOW - THE LEGEND OF TELL	12.95
CRUISE FOR A CORPSE	16.95
CRYSTAL KINGDOM DIZZY	12.95
CYBERCON II	11.40
CYBERSPACE (11M)	29.45
D-DAY (10-12)	21.95
DALEK ATTACK	6.96
DEMON BLUE	8.75
DIZZY COLLECTION	20.95
DIZZY PANIC	6.96
DOO CROCS OUTRAGEOUS ADVENTURES	30.95
DOO RIGHT	6.96
DREADNOUGHTS (11M)	6.96
DREADNOUGHTS - BISMARCK	14.95
DREADNOUGHTS - IRONCLADS	14.95
ELITE II - FRONTIER (11M)	24.95
EPIC	12.95
Escape from Planet of the Monsters	6.96
ESPANA - THE GAMES '92	11.40
EUROPEAN FOOTBALL CHAMP	11.40
F-15 STRIKE EAGLE II	14.95
F-19 STEALTH FIGHTER	14.95
F-29 DETAILER	21.95
F1 (RACIAL) (11M)	21.95
FACE OFF - ICE HOCKEY	8.75
FANTASY WORLD DIZZY	6.96
FIRE AND BRIMSTONE	6.96
FIRE AND ICE	21.95
FIRST DIVISION MANAGER	6.96
FLIMBO'S QUEST	6.96
FOOTBALL MANAGER 3	21.95
FORGOTTEN WORLDS	4.95
FORMULA 1 GRAND PRIX	29.45
FUTURE WARS	11.40
GAUNTLET II	24.95
GENESIA	6.96
GHOULS 'N' GHOSTS	11.40
GO FOR GOLD	6.96
GOAL (11M)	21.95
GOAL - WORLD CUP EDITION (11M)	11.40
GRAHAM TAYLOR'S SOCCER	8.75
GUNSHIP	8.75
HARD DRIVEN 2	11.40
HARDWARE	8.75
HARRIER ASSAULT (11M)	29.45
HIGH STEEL	6.96
HILL STREET BLUES	8.75
HOOK (11M)	8.75
HOYLES BOOK OF GAMES - VOL 1	11.40
HOYLES BOOK OF GAMES - VOL 2	11.40
HUCKLEBERRY HOUND	8.75
HUMANS	24.95
IMPOSSIBLE MISSION 2	6.96
INDIANA JONES & FATE ATL. (ACT)	12.95
INDIANA JONES & L. CRUSADE (11M)	8.75
INTELLIGENT STRATEGY GAMES	21.95
INTERNATIONAL RUGBY CHALLENGE	21.95
INTERNATIONAL SOCCER CHALLENGE	8.75
ISHAR (11M)	27.75
ISAR 3	27.75
ITALY 1990	6.96
JAMES POND	6.96
JIMMY WHITE'S SNOOKER	12.95
KIDS RUN FOR IT	12.95
KINGMAKER	30.30
KINGS QUEST 1	12.95

KINGS QUEST 2	11.40
KINGS QUEST 3	14.95
KINGS QUEST 4	14.95
KNIGHTS OF THE SKY (11M)	14.95
LASER SQUAD	8.75
LAST NINJA III	8.75
LED STORM	6.96
LEEDS UNITED CHAMPIONS	21.95
LEGENDS OF VAL-UR	31.95
LEISURE SUIT LARRY 1	12.95
LEISURE SUIT LARRY 2	12.95
LEISURE SUIT LARRY 3	12.95
LETHAL WEAPON (11M)	8.75
LOMBARD RAC RALLY	6.96
LOOM	12.95
LOTUS TURBO CHALLENGE II	8.75
LOTUS TURBO TRILOGY	24.95
LURE OF THE TEMPTRESS	12.95
M1 TANK PLATOON	12.95
MAGIC BOY	21.95
MANHUNTER	12.95
MANIAC MANSION	12.30

Pixie & Dixie



only £8.75

MCDONALD LAND	21.95
MEGA TWINS	8.75
MERCS	8.75
MICROPROSE GOLF	29.45
MIDWINTER	11.40
MIDWINTER II (11M)	14.95
MIG 29 FULCRUM (11M)	11.40
MOONSTONE	24.95
MOONWALKER	6.96
MURDER	8.75
MICHEL MANSSELL (11M)	24.95
NIGHT SHIFT	11.40
NINJA REMIX	8.75
NODDY'S PLAYTIME	20.95
ONE STEP BEYOND	16.95
OPERATION HARRIER	8.75
OPERATION STEALTH	12.95
ORIENTAL GAMES	29.45
OUTRUN EUROPA	8.75
PANZA KICK BOXING	8.75
PARASOL STARS	8.75
PINBALL MAGIC	6.96
PIRATES	12.30
PIXIE & DIXIE	8.75
PLAYDOYS	20.95
POLICE QUEST 1	14.95
POLICE QUEST 2	12.95
POPEYE 2	8.75
POPEYE 3	8.75
POPULOUS II (11M)	12.95
POPULOUS/PROMISED LANDS	12.30
POSTMAN PAT	6.96
POSTMAN PAT 3	6.96
POWERMONGER PLUS DATA DISK	12.95
PREMIER MANAGER 2	21.95
P.R.I. BASEBALL 2	21.50
RAMBO II	6.96
REACH FOR THE SKIES	25.99
REALMS	11.40
RICK DANGEROUS I	6.96
RICK DANGEROUS II	8.75
RISKY WOODS	11.40
ROADBLASTERS	6.96
ROBIN HOOD (11M)	11.40
ROBIN HOOD - LEGEND QUEST	6.96

**IF YOU CAN'T SEE
 WHAT YOU WANT HERE**
 Our sales staff and computerised
 systems can help you - try them!

ROBINSON'S REQUIEM	27.75
ROBOCOD	8.75
ROBOCOD II	11.40
RODLAND	8.75
SAVAGE	8.75
SECRET OF MONKEY ISLAND (11M)	14.95
SENSIBLE SOCCER INTL EDITION	16.95
SHADOWWORLDS (11M)	21.95
SHUTTLE	12.95
SIMPSONS	8.75
SIMPSONS: BART VS THE WORLD	21.95
SLIGHTLY MAGIC	6.96
SOOTY & SWEEP	6.96
SOOTYS FUN WITH NUMBERS	16.95
SPACE CRUSADE	8.75
SPACE QUEST 1	14.95
SPACE QUEST 2	11.40
SPEEDBALL 2	8.75
SPINBOUND DIZZY	6.96
STARBUST	21.95
STARGLIDER II	8.75
STONE AGE	21.95
STREET FIGHTER	8.75
STREET FIGHTER 2 (11M)	12.95
STRIDER	8.75
STRIDER 2	6.96
STRIKE FLEET	12.30
STRIKER	8.75
STUN RUNNER	6.96
STUNT CAR RACER	6.96
SUPER ALL STARS	21.95
SUPER CAULDRON	21.95
SUPER LEAGUE MANAGER	21.95
SUPER MONACO G.P.	8.75
SUPREMACY	11.40
TACTICAL MANAGER	21.95
TENNIS CUP 2	8.75
TERMINATOR II	6.96
TEST DRIVE II	6.96
THE IMMORTAL	11.40
THE MONSTERS	6.96
THE PATRICIAN	27.75
THEIR FINEST HOUR	14.95
- FINEST MISSIONS VOL 1	9.60
THE MATHS THE TANK ENGINE	6.96
THOMAS'S BIG RACE	11.40
TOKI	8.75
TORNADO	29.45
TRACKSUIT MANAGER	6.96
TRANSFANTICA	8.75
TREASURE ISLAND DIZZY	4.45
TURRICAN	6.96
TURRICAN II	6.96
TUSKER	6.96
TWILIGHT 2000	29.45
WAR IN THE GULF (11M)	24.95
WINTER GOLD	12.95
WIZKID	11.40
WORKS TEAM RALLY	6.96
WORLD CLASS LEADERBOARD	8.75
WWF EUROPEAN RAMPAGE	9.99
WWF WRESTLEMANIA	8.75
X-OUT	6.96
XENON II	8.75
Z-OUT	6.96
ZAK MCKRACKEN	11.40

Hint Books

LOOM	7.99
MANIAC MANSION	7.99
SECRET OF MONKEY ISLAND	9.99
ZAK MCKRACKEN	7.99

Educational

ADI ENGLISH (12-13 or 13-14 or 14-15)	21.95
ADI FRENCH (11-12 or 12-13)	21.95
ADI FRENCH (13-14 or 14-15)	21.95
ADI MATHS (14-15)	21.95
ANSWER BACK JUNIOR QUIZ (6-11)	17.95
ANSWER BACK SENIOR QUIZ (12-AD)	17.95
BETTER MATHS (12-16)	19.35
BETTER SPELLING (8-ADULT)	19.35
CAVE MAZE	12.95
FRACTION GOBLINS	12.95
FRENCH MISTRESS	17.95
FUN SCHOOL 2 (8-8)	6.96
FUN SCHOOL 2 (OVER 8)	6.96
FUN SCHOOL 2 (UNDER 6)	6.96
FUN SCHOOL 4 (7-11)	20.95
FUN SCHOOL 4 (UNDER 5'S)	20.95
GERMAN MASTER	17.95
ITALIAN TUTOR	17.95
JUNIOR TYPIST (5-10)	14.95
MAGIC MATHS (4-8)	19.35
MATHS ADVENTURE (6-14)	22.95
MATHS DRAGONS	12.95
MATHS MANIA (6-12)	19.35
MICRO ENGLISH (8-12)	21.50
MICRO FRENCH (BEGINNERS-12)	21.50
MICRO GERMAN (Begin-12)	21.50
MICRO MATHS (11-12)	21.50
MICRO SCIENCE (8-12)	21.50
PICTURE FRACTIONS	12.95
PRIMARY MATHS COURSE (3-12)	21.50
REASONING WITH TROLLS	12.95
SPANISH TUTOR	17.95
THE THREE BEARS (5-10)	19.35
TIDY THE HOUSE	12.95
TIME FILES	12.95

SPECIAL OFFER

**BUY 50 OR MORE
 DISKS AND DEDUCT
 £2 FROM THE LISTED
 PRICE OF 1 OR MORE
 DISK BOXES**

(Does not apply to Slimpack)

DataGEM

bas supplied computer
 hardware and software to tens
 of thousands of satisfied
 customers since 1987

Amiga Atari PC Sega

Trust us to have all you need

3.5" Disks

**NEW LOWER
 DISK PRICES**
 ANY QUANTITY SUPPLIED

Qty	DSD	DSHD
10	4.95	7.80
20	9.85	15.35
25	11.95	18.25
30	14.25	21.80
35	16.65	25.20
40	18.55	28.60
45	18.65	32.10
50	18.75	34.40
80	29.95	52.30
100	33.99	61.90
120	40.75	72.40
150	48.95	90.25
200	64.95	115.75
250	80.95	143.30
300	96.95	170.75
400	128.99	221.70
500	148.95	269.65
600	178.75	320.60
1000	297.85	524.40

All our disks are fully
 guaranteed and include labels.

Miscellaneous

Workcentre	31.95
Includes mouse mat, house & dust cover	
Head Cleaner (3.5")	3.75
Mouse House	2.95
Mouse Mat	2.95
Parallel port extension cable	6.80
Parallel printer cable (5m)	10.95
Roboshift (auto Mouse/Joystick switch)	14.75
Joystick & Mouse Extension Cable (8')	4.95
Extends the two ports from under the ST	
so you can see where to plug them in!	

Dust Covers

Alan	3.65
Monitor	6.99
STAR LC10 printer	6.99
STAR LC24 printer	6.99

Disk Boxes

10 Slimpack	0.94
40	4.95
50	5.60
80	6.30
80 Stackable	12.95
100	6.80
110 Stackable	13.95
120	8.75

Joysticks

Competition Pro 5000-black	9.00
FreeWheel-digital	13.75
Maverick I (QS128F) or 1M (QS138F)	27.00
Megastar AF (SV133)	22.00
MegaStick II	9.99
Navigator AF	13.75
Python I (QS130F)	9.25
Python 1M (QS137F)	9.75
Quickshot I Turbo (SV121)	7.95
Quickshot II Turbo	4.95
Speeding AF	7.95
Star Probe	11.00
Starfighter I pad	13.50
Supercharger (SV123)	7.95
The Bug (black or green)	9.00
Topstar (SV127)	13.50
	21.50

Printer Ribbons

STAR LC10/20/100 black (LC09)	4.50
STAR LC10/20/100 colour (LC04)	6.80
STAR LC200 colour (ZX9)	6.25
STAR LC200 colour (ZX04)	12.30
STAR LC24 series black (ZX4)	13.50
STAR LC24-200/XB-24 series colour (X24CL)	13.75

NO CREDIT CARD SURCHARGES

**WE WILL NOT CHARGE YOUR
 CREDIT CARD UNTIL THE GOODS
 HAVE BEEN DESPATCHED**

071 608 0624
Fax: 071 608 0688

DataGEM Ltd

Department STF, 23 Pittfield St, London N1 6HB

Orders against cheques with valid guarantee card numbers will be
 despatched immediately, otherwise upon cheque clearance.

All prices include UK postage and VAT and are effective until 2nd October 1994

On overseas orders, postage is charged at cost. New titles will be sent as released and are subject to
 manufacturers' price reviews. All orders taken subject to our standard terms and conditions. E&OE

GET THE FULL STORY

Each program named here also features its issue number. If you want to know more about the item in question and why we were so impressed then get yourself the copy of **ST FORMAT** with the full story. Turn to page 85 and you'll find our rather splendid Back Issues service. You'll not only get all the original review information but a spiffy Cover Disk into the bargain. Smart eh!

Miscellaneous	Manufacturer	Function	Issue	Score	Price
Crazy Dots	System Solutions	Graphics card	45	93	£449/529
Reflex Graphics Card	Titan Designs	Graphics card	45	90	£224.00
SC1435	Atari	Monitor	37	90	£179.99
SM124	Atari	Monitor	31	90	£129.95
Spectre GCR	Ladbroke	Emulator	25	94	£300.00
Supercharger 286	Condor	Emulator	25	92	£528.00
SGS Net	Bath BBS	Networker	9	95	£145.95
2400 Modem	Supra	Modem	31	90	£79.99
VideoMaster	Microdeal	Digitiser	42	92	£69.95
GST Gold	Third Coast	Genlock	5	90	£499.00

their price has stayed about the same. If you're looking for a good new drive the oldies mentioned here are really past their sell-by date when compared to the Gasteiner SCSI Drive, MiniS and Progate 2 85DC.

The Progate is a solid 85MByte hard drive. It comes complete with Protar's own suite of utilities and is ready formatted, with full auto-boot capabilities. It's a real plug-in-and-go drive.

The MiniS is a tiny drive that boasts a mighty 105 or 240MByte capacity. Like the Progate, it's ready formatted and all you have to do is plug in the connecting cable, then you're off.

Miscellaneous

So here we are in Miscellaneous-land, the part of the hardware round-up where we can't classify things any more specifically, so they're all being recklessly lumped in together and examined in no apparent order. Starting with...

...the first two, which are graphics cards. These work. Both cards give your machine the power to go beyond the normal ST boundaries. Crazy Dots hits the 24-bit arena, while Reflex goes for the jugular of high-resolution mono displays. They take the ST into new realms of display and graphic performance, and, for that, they deserve a **FORMAT** Gold.

piece of kit really isn't as impressive as it used to be.

Two more victims of the march of time are SGS Net and the 2400 Modem. SGS Net was a cheap breakthrough, finally enabling STs to be bound together to share files and data. At the time this was a real innovation and the price was right, hence its **FORMAT** Gold status. Now it has been surpassed, sad but true. The same is true of the 2400 modem. Once it was fast enough to make others stand back and applaud. Now they keep a polite silence as, like hard drives, the advances in technology have helped make modems faster, harder, better and cheaper. So

Digitas spent years puzzling how to generate a sync pulse that the ST's could accept. Third Coast's solution was hardware based, which explained the cost. Still it worked and at last ST owners had access to video technology.

VideoMaster is proof that nothing is impossible in computing – well, not for long anyway. Taking the form of plug-in widget and specialist software, VideoMaster offered ST fans the chance to play with a video digitising suite. And great fun it was too – so much so we gave the software away with **ST FORMAT** 59.

And that's it – the best of the rest. Hope you enjoyed it. **stf**

Business	Publisher	Issue	Score	Price
Home Accounts 2	Digitas	28	90	£54.95
Hyperchart	Atari	12	90	£129.99
Superbase Personal 2	Precision	19	91	£39.95
System 3	Digitas	11	90	£59.99

Programming lang	Publisher	Issue	Score	Price
Devpac 2	HiSoft	30	95	£39.95
Devpac 3	HiSoft	44	91	£79.95
GFA 3 Compiler	GFA	2	91	£29.95
GFA Basic 3.5	GFA	46	91	STF Cover Disk 35
Prospero Pascal	Prospero	30	95	£102.12
STOS	Mandarin	30	92	£29.99

The Gasteiner SCSI drives start at a minimum of 170MBytes (although Gasteiner can supply a range of larger units). STs need a host adaptor, but then you get one bundled with the drive, for £300, which is still not a high price for some major storage space.

All three of these drives are at the cutting edge of the hard drive technology. They're compact, big and very fast. If any manufacturers out there are thinking of launching a new hard drive – these three are the ones to beat.

The SC1435 and SM124 are monitors. They're made by Atari and henceforth are so darned suited to the ST it's sickening. However, they're now discontinued. Sob.

The same sad fate befell the emulation twins, Spectre GCR and Supercharger. Spectre was a splendid Mac emulator – and the ST made a terrifically good Mac. Supercharger did the same for AT PCs, except that AT's were soon surpassed by escalating PC technology. Unfortunately (for them) being able to emulate an outdated

once again what was once a leader in its field is still a fine bit of kit but not really up to the demands of 1994 comms.

GST Gold earned its spurs for simply being the first to crack a difficult nut, way back in the days when nobody could work out how to make an ST genlock really work. Companies like

Contacts

16/32 Systems	0634 710788
AVR	See HiSoft
Atari	0753 533344
Analogic	081 5469575
Arnor	0733 68909
Bath BBS	0225 836182
CGS Computerbild	081 6797307
Cannon	081 773 3173
Cheetah	061 7077080
Compo	0487 3582
Cumana	0705 325354
Database	See Europress Software
Digitas	0395 270273
Domark	081 780 2222
Electronic Arts	0753 549442
Europress Software	0625 85933
Evesham	0386 765500
FaST Club	0602 410241
First Computer Centre	0532 319444
Gajits	061 2362515
Gasteiner	081 3456000
GFA	0743 794941
Harman Audio	081 2075050
HiSoft	0525 718181
Hawlett Packard	0344 369369
Jumping Bean	0602 706707
Ladbroke Computing	0772 203166
Llamosoft	0734 814478
Marpet Developments	0423 712600
Microdeal	See HiSoft
Naksha	0234 843388
Panasonic	0344 853195
Pandaal	0234 327422
Power Computing	0234 843388
RC Simulations	0272 550900
Silica	081 3091111
Sound Technology	0462 480000
Star	0494 471111
ST Club	See FaST Club
System Solutions	0753 832212
Titan Designs	021 4141630
Yamaha	0908 366700
zzSoft	0254 386192

NB: In these reviews we have credited the original publisher/producer with each product. Some of these may have changed (for example, for AVR you should now contact HiSoft). Wherever possible we have cross-referenced new suppliers with old. No games publishers have been listed as these companies are unable to sell software direct to the public. We have not listed contact numbers for delisted products or for defunct companies (well at least we've tried).

GIMME, GIMME, GIMME!

A number of the programs in this feature have been delisted (they're no longer available) but that doesn't mean you don't want them. Normally this would result in much gnashing of teeth and huge helpings of frustration. **ST FORMAT** now has a solution – **READER ADS**.

You probably have a few utilities or games that you no longer use, or maybe

have never even loaded in the first place. If there's something you want that's no longer on sale there's a good chance that a copy is sitting around on somebody's software shelf. Why not use our reader ads service to tell the world exactly what you want? You know it makes sense!

Turn to page 76 right to check out the full details and start advertising.

REVIEWS...

This month's reviews section is stuffed to overflowing with some of the most powerful, innovative and flexible releases the ST's ever seen. From word processors scoring 90% or more to the best PD game ever released, we've got the lot.

30: That's Write 3

Take your documents further than they've ever been before, with a brand new word processor. The first in this month's battle of the WPs begins on page 30, with a **FORMAT** Gold-winner setting the pace.

32: Truelmage

You could be walking down a street, when someone rushes up to you with a disk, yelling, "Quick - convert this Targa file into a Degas image, then dither it slightly and convert it to monochrome." What would you do? Be prepared.



■ Forget the stereograms. Stereo CAD creates, just stare at this pattern for a few minutes. That'll do the trick.

34: Family Roots 2

Losing touch with your relations? That may be a good thing, but what about the generations past? If you're into genealogy we might just have the software for you...

36: Protext 6.5

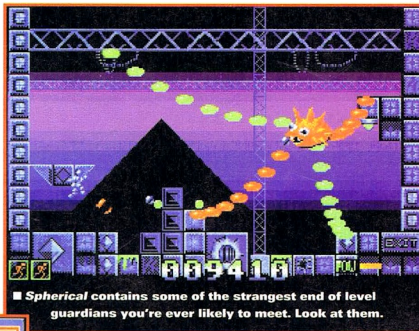
It's back, and it's had even more bits added on. Check out page 36 for the full review of the grandpappy of all ST word processors. It started here, ten years ago.

38: SpeedoGDOS V5.0

Give your GEM programs a touch of class, with the latest version of the perfect font system.

40: Font Packages

Tired of producing boring documents? Do you want to give your printouts some pizzazz? We might



■ Spherical contains some of the strangest end of level guardians you're ever likely to meet. Look at them.

have just the thing, in the form of 200 new lettering styles to play with.

41: Clarity Falcon V2

The direct-to-disk Falcon music maker's second coming, but will we be any kinder this time? See if it's got a good beat or if it just gets a good beating.

42: Edith

She's small, she's stocky, and she can stand up for herself in a fight. She's Edith and she's a text editor (or should that be editress?) that can meet all your programming needs.

43: Storm Tracker

Make beautiful music with one of the best soundtracker packages you're likely to come across.

44: Stereo CAD

Stereograms make wonderful gifts for friends and family alike. Tell someone you love them this month by slamming their eyeballs into each other.



■ Rugby League Coach. "Really? We thought it was Gemulator. No, really." You must be thick then.

46: Papyrus Gold v3.52

Gosh! Another word processor! Will it measure up to the standards set by *That's Write* and *Protext*? Can you bear the excitement? Oh.

48: Gemulator

It turns out that there are quite a few PC-owning ST fans out there, who'd really like to be able to use their ST software on their brand new, extremely expensive PCs. And here we present the answer - a GEM emulator.

50: Public Sector

So what have the freebies got to say for themselves? This month's PD collection includes education, music, entertainment and even a word processor to add to the battle.

54: Indies Corner

Just one package coming under the Indies microscope this month: *SpriteFX*, an excellent sprite handling and programming utility for people who wear glasses.

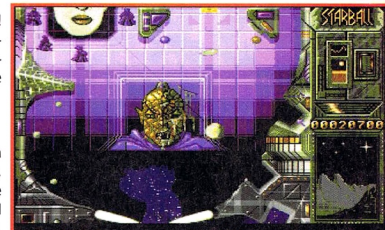
57: Rugby League Coach - Preview

Power lunch. Tell people what to do. Move huge quantities of money around. Set

THOSE MARKS IN FULL

Probably the biggest problem we face as reviewers is misinterpretation of the marks we give. In order to clear up all confusion from here on in and stop angry manufacturers hassling us, here's the guide to *STF* marks. And remember, we only ever review finished products.

90-100	Go and buy this now. No, really - now.
80-90	An essential addition to your setup.
70-80	Definitely worth considering.
60-70	Worth considering.
50-60	Probably very limited.
40-50	Just below average.
30-40	It's along the right lines.
20-30	Still not very good.
10-20	Lacking, well, everything really.
00-10	Turn. The. Page. Now.



■ Starball - top pinball action, and not a commercial profit in sight. A vindication of PD, indeed.

schedules. Fail to chat up your secretary. Drink coffee. If you've got any time left, manage a rugby team.

58: Premier Manager 2

Gremlin's deep, exciting, beautiful, fun, and excellent sequel to the acclaimed *Premier Manager* is idolised by a football-crazy mania... ah, it's reviewed by our Editor.

60: Spherical

Balls. Lots of 'em. All doing different things, forming bad guys, smashing them apart again, and generally making up Fusion's latest release.

64: Starball

Is it the best PD game ever? *STF* takes a look at one of the most astounding games to come into the *STF* office under the guise of public domain.

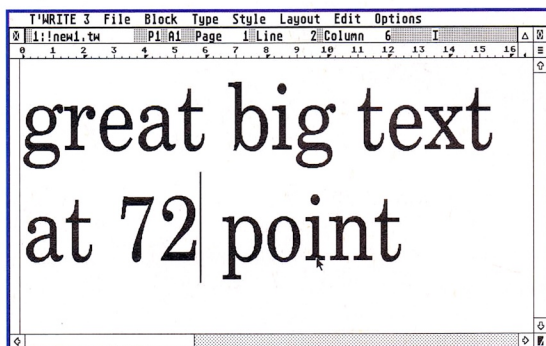
THAT'S WRITE 3



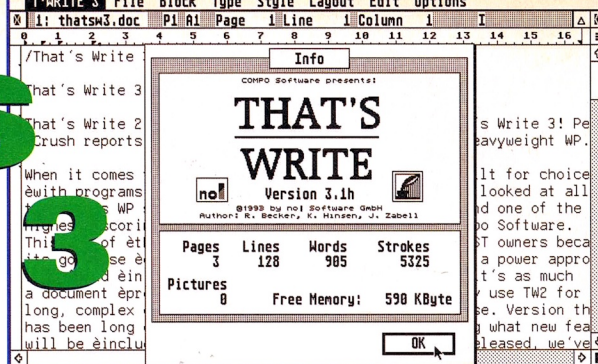
The latest incarnation of Compo's heavyweight word processor appears at last. But how does it compete with all the others.

Back in the mists of time (STF 60, in fact) we ran a huge round-up of word processors, and one of the highest scoring programs – with a massive 90% – was

That's Write 2. It's a top-of-the-range word processor whose good use of graphics and multiple fonts give it a power approaching that found in desktop publishing software. In fact,



■ This is New Century Schoolbook at 72 point. It looks good on screen and even smoother when you print it out. And it's enormous.



■ Here it is! The brand new version of *That's Write 3*! It's big and great and powerful and it can even load *Protext* format text. After a fashion.

it's as much a document processor as a word processor, and you could certainly use TW2 for long, complex projects as well as simpler everyday use. But what's new about *That's Write* version 3?

Great new features

There are loads of new features in TW3 (see the panel for a rundown) but the most important improvement must be the use of Speedo outline fonts. SpeedoGDOS (the latest version of which is reviewed on page 38) uses the same type of font, their advantage being that they can be scaled to almost any size and still look good on screen and in print. So goodbye to those horrible jagged bitmapped fonts of old. It's claimed that these Bitstream Speedo fonts are even better than the PostScript and TrueType fonts as used on Macs and PCs, so it looks like ST owners have something to really boast about. And,

even better, you don't need SpeedoGDOS installed to use the fonts. Those crafty Compo programmers have set things up so that TW3 can use any Speedo fonts all by itself. This saves you money because you don't need to buy SpeedoGDOS, and it saves you memory – SpeedoGDOS

requires 2MBytes of RAM to work. There are 14 Speedo fonts supplied with TW3 – and they're all good usable ones – and any other Speedo fonts can be utilised too. Compo sell two packs containing

100 Speedo fonts for just £49 each pack (see the reviews on page 40).

Techie details

TW3 is supplied on five double-sided disks – necessary for containing all those new fonts and features – and you need at least 1MByte of RAM in your ST to run it, although just to be really original, the more memory you have the better the program runs,

"The latest font technology, an up-to-the-minute user interface and great all-round performance"

What's new, bro?

Compo's programmers have been beaver away. Just look at some of the new ideas they've crammed into TW3.

- 1 *That's Write 3* now supports SpeedoGDOS outline fonts of up to 144 points in size. That means letters up to two inches in height.
- 2 Improved user interface provides Falcon and MultiTOS type features with older TOS versions, gives better screen displays for all users.
- 3 A context-sensitive Help feature now gives help instructions that are relevant to the tasks being currently performed.
- 4 A set of new template-style documents for commonly-used forms such as invoices, faxes and standard letters is now provided.
- 5 Caches images for faster loading of picture documents, and special routines accelerate

monochrome modes, which provides speed improvements when running TW3.

- 6 Improved ASCII import and export function – now includes better support for Windows and Mac ASCII files as well as ST versions.
- 7 Improved mailmerge facilities. Now XACC data can transfer directly from Desk Accessories (or any other programs that support XACC) into *That's Write 3*.
- 8 *That's Write 3* can now mark individual characters by dragging the cursor instead of line by line selection, for improved block marking.
- 9 Improved paragraph layout system with options to specify the style of the following paragraph and also forced page breaks at paragraph style.
- 10 An enhanced and easy-to-use Search and Replace function, complete with a user-

definable wildcard feature, is now built into *That's Write 3* for the first time.

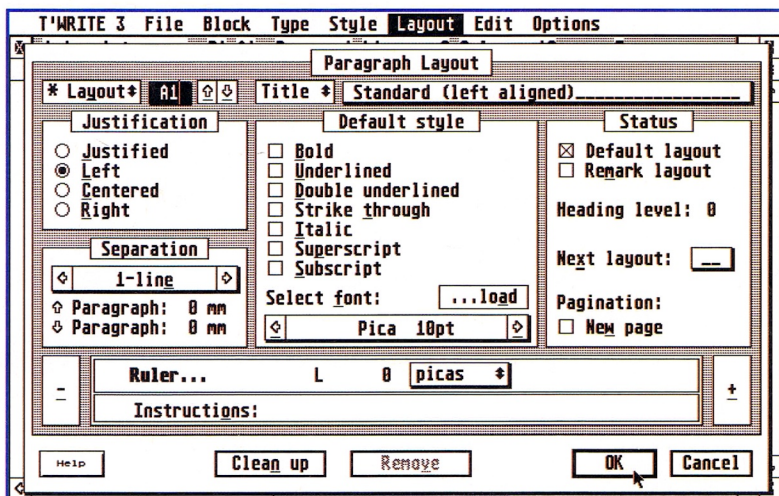
- 11 A new image editing and loading feature enables text and pictures to be side by side instead of being on their own lines as before.
- 12 Improved spell-checker shows words in context. Correction list checks alternatives faster and enables words to be added to dictionary.
- 13 New features on-screen Macro definition display, as well as improved Set Marker functions and improved Font, Page and Paragraph Remove functions.
- 14 *That's Write 3* enables up to 36 fonts to be loaded at any one time, with optional support for standard Atari keyboard short cuts.
- 15 The ability to run on a system with just one double-sided disk drive and 1MByte of RAM (but fonts and document length are restricted).

and the more fonts can be used. Unlike some top-end WPs, you don't need a hard drive to make TW3 work – it even works on a single-drive system if you don't mind changing disks now and then (hey, you've got nothing better to do, surely?).

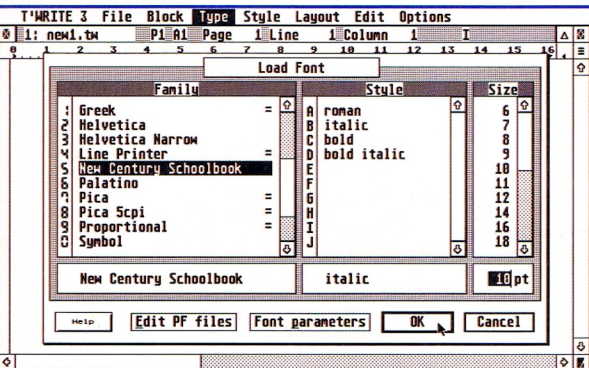
Setting up the program is dead easy – TW3 installs itself to suit your ST system and printer. A new feature is the optional NoSystem, which gives TW3 dialogs an attractive 3D look. To be even more flash, TW3 uses an enhanced form of GEM, enabling you to switch off one or both scroll-bars to make more room on screen, and perform other handy tricks.

But is it any good?

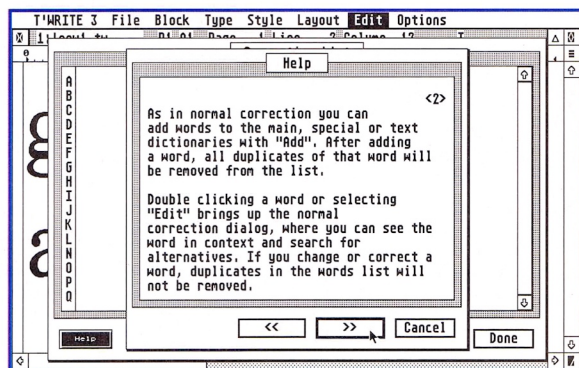
Compo's new word processor has been worth the wait. This evolving software offers you the benefit of the latest font technology, with an up-to-the-minute user interface and great all-round performance. And it's good to see that this powerful new program will run on a modest setup, whereas similar software often dictates that you must have a power



■ "This is it, Mr President - the mountain is at DefCom 1, troops are moving into the red nation, the computer is ready for the final launch sequence codes." Due to an administrative error, the whole of Russia was italicized shortly after.



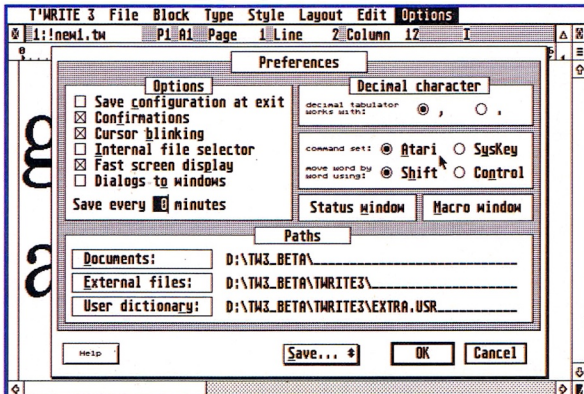
■ Look at all these lovely... fonts. You get 14 with the program and you can add more Speedo fonts from many sources, if you're feeling really, er, wild.



■ All functions have Help text, which comes up in a little scrollable window. Handy for those long car journeys. (What are you talking about? - Trent)

user's system. Although not everyone has a 2MByte ST, most of us have at least a 1MByte machine, which can happily run TW3. The new spell-check features are excellent, and the outline fonts are fast and smooth. The only slight disappointment is the lack of a thesaurus, which will have to be added if *That's Write* wants to be supreme among ST word processors. Still, Compo is already working on versions 4 and 5, which should include this feature. When it comes to word processing on your ST you're spoilt for choice, but *That's Write 3* holds its own. **stf**

PETER CRUSH



■ Our boring correspondent writes: "This is the Preferences screen, commonly found nestling in amongst the typical 'word processor' program. It's known for..." That'll do.

That's Write 3

£129 Compo Software
= 04873 582

Highs

- Uses outline Speedo fonts without SpeedoGDS
- Powerful yet easy to use
- Works on a 1MByte ST

Lows

- Lacks a thesaurus

What else?

- Papyrus Gold, £132.95 from HiSoft (= 0525 718181) also uses Speedo fonts, but requires Speedo GDS and 2MBytes of RAM to run. See page 46.
- Protext v6.5, £99 from Armor (= 0733 68909) has more graphical abilities than previous versions. See page 36.

91%

TRUEIMAGE

The market for high-end graphics programs shows no signs of slowing down. We take the wrapper off the latest multicoloured package.

The pile of graphics programs for the Atari family just keeps growing – a new art package seems to appear every month. The latest addition is *TrueImage*, which hails from HiSoft and follows up *True Paint* (STF 61, 82%), their first outing into true-colour graphics.

TrueImage is a mixture of things: an image converter, editor and processor all in one. It runs on all

machines in the ST family, as long as you have at least 2MBytes of RAM, although 4MBytes is recommended – high quality graphics need lots of space to breathe. *TrueImage* is primarily designed to work with 24-bit images, and looks

“It’s as an image convertor that *TrueImage* excels. It can load just about every picture format under the sun”

best on a system with 16-bit or 256-colour graphics, although you can use it in lesser modes. It’s also more at home on the Falcon and TT.

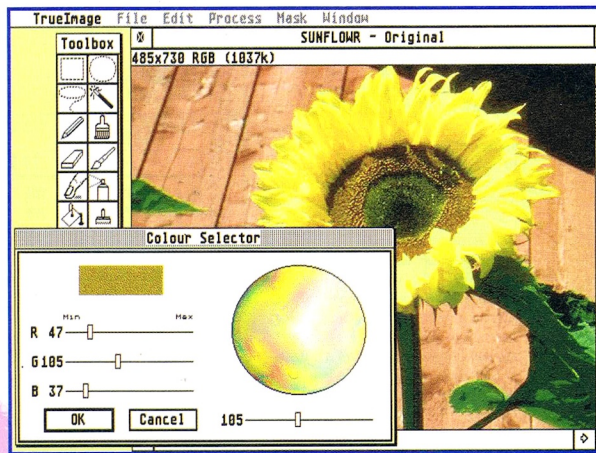
You’re on familiar ground as soon as you load *TrueImage*. It uses GEM to the full, with images being loaded into GEM windows and all the functions accessed using the menus

or a tool-box of icons. While all images are handled internally in as high a colour depth as possible, the screen shows only a representation using the screen colours available.

This means that you can load a 24-bit image in any resolution, edit and process it, then save it out again in all its 24-bit glory. You have excellent control over the way the image is shown on screen, with lots of different dither and palette modes, but the display can get slow, because it has to calculate a new screen image whenever you alter the picture.

Image conversion

TrueImage supports an impressive range of picture formats. It uses HiSoft’s EFM system, which means that the code for loading and saving each type of picture format is held as an external file. As a result you can add extra formats or update them at any time. It also means you don’t have to hold them in memory, which is handy when supporting so many



■ A true-colour image shown in 256-colour mode. The palette wheel shows the range of colours in your image. They are calculated to give the best possible representation of the 24-bit original.

formats. The picture types supported include JPEG, PhotoCD, Spectrum 512, TIF, GIF and Degas/Elite. This, combined with the powerful dithering and palette control, makes *TrueImage* a flexible image converter.

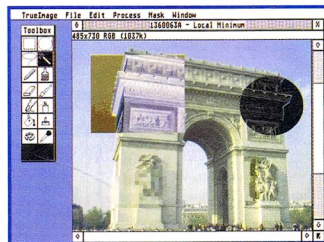
Image editing

TrueImage offers a small clutch of configurable editing tools. Brushes come in a selection of fixed sizes, and feature variable opacity which you can use to create clever effects. Along with the basic drawing tools you also get Smudge, a brush with blurred edges, an Eye-dropper to pick colours from your picture and a Stamp tool, which enables you to paint using sections taken from elsewhere in your image.

Despite the fact that it features some useful tools, pixel editing using *TrueImage* is awkward. There is no hot-spot zoom, and after selecting a tool and clicking on the image window the mouse remains as an arrow. When you then click on the image to start editing there is a brief pause, while the mouse changes to a busy bee for a moment and the program sorts itself out. It’s all rather clumsy – you can’t, for example, see the shape of your selected brush, and the delay makes accurate editing more difficult. You would certainly need to use another package if you wanted to do a lot of original work with the brush.

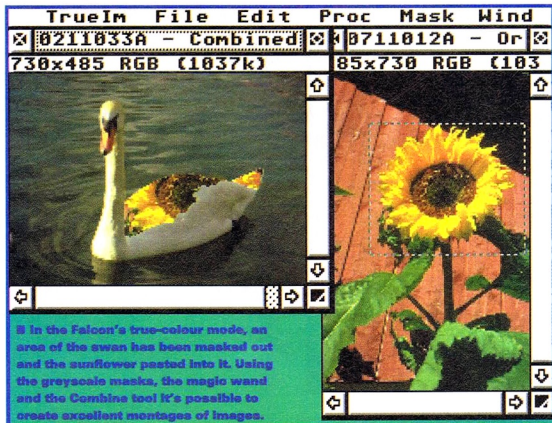
Cut and Paste is all there. There are four ways of selecting an area: as

a rectangle, an ellipse, a free-form shape (using the lasso tool) or with the magic wand. This last one is invaluable – just click on a section of the image and it selects an area of similar colour around it. You can adjust the sensitivity, and it works best when the section you want is in sharp contrast with the background. Selected areas, or masks, can be loaded and saved, after which any effect you do only takes place within the mask. The masks can be saved as greyscale images and edited like any



■ Image processing can be applied to a selected area rather than the whole image.

other image, and you can blur the edges so that sections pasted down look much more convincing. You can also combine sections you have cut out using Multiply, Add, Difference and Negatives. These methods effect the way the colours are mixed together – for example, Multiply multiplies the two colour values together and divides them by 255. The effect is like superimposing two colour slides.



■ In the Falcon’s true-colour mode, an area of the swan has been masked out and the sunflower pasted into it. Using the greyscale masks, the magic wand and the Combine tool it’s possible to create excellent montages of images.



You can also crop and rescale images. Crop is nicely done—just choose the new size and it appears as a rectangle, which you move about the image until you're happy with the selection. Rescale is more clumsy, you have pixel-perfect control but you can't lock the aspect ratio, which means that a spot of slightly complicated maths is called for.



■ **Running in ST low resolution. Not really the best way to use image processing on 24-bit images but perfectly adequate for conversion work.**

Image processing

Image processing functions are fairly well represented, with a set of 20 or so filters. Along with the more common Contrast and Brightness, *TrueImage* features Blur, Equalise, Sharpen, Emboss and a handful of others—enough to process a poor image into a better one and add a few special effects. For the more technically minded you can construct your own digital filter coefficients.

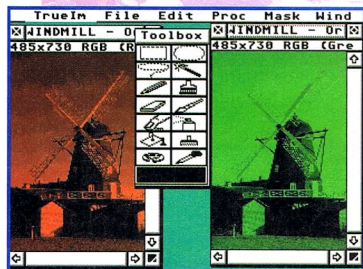
The Falcon's DSP chip is used for some of the filters, which speeds things up, although you still spend a lot of time watching the status bar creep across the screen. You can pre-

quality and it does a passable job of creating 16-colour images. There is no shortage of monochrome dithering patterns either—if you want to convert true-colour images into monochrome ones *TrueImage* takes some beating, and if you're into DTP it could be just the thing you need. It takes a little experimenting to understand the way it works, but you just have to remember that the displayed picture and the actual picture loaded are two different things altogether.

TrueImage is a brave effort, and an improvement over *True Paint*, which never really lived up to its promise. On the other hand, *TrueImage* costs twice as much as *Rainbow* (STF 62, 81%) and is only a little shy of the price of *Studio Photo* (STF 53, 82%). It's got a long way to go, as an editor, but as an image processor it's not bad at all. The interface, however, needs some of the rough edges knocked off it and a speed injection—particularly compared to programs like *Chagall* (STF 57, 94%), which show how GEM can really be put through its paces.

HiSoft have an excellent record of supporting STs and *TrueImage* is certainly worth a look if you do a lot of image converting and need to do a spot of image processing into the bargain. **stf**

CHRIS LLOYD



■ **If the image is in true-colour format you can separate out the red, green and blue channels, which is good way to increase the contrast of a section of an image before using the magic wand selection tool.**

view effects, but only on the whole image. A quicker way is to select a small section, run your filter, and if you don't like it just undo it.

Problems, problems

TrueImage has its fair share of problems. It proved slightly unstable in testing, crashing more than once. While it does the editing and processing images jobs, it does neither particularly well. The picture editing side is least impressive, being limited and cumbersome. Image processing is better, rivaling *Studio Photo* in many areas, and the addition of proper greyscale masks is a pokey effect.

But it's as an image converter that *TrueImage* excels. It can load just about every picture format under the sun and do a range of clever dithering effects. You can reduce 24-bit pictures to 256 colours with little loss of

TrueImage

£59.95 HiSoft
☎ 0525 718181
Works on all STs, minimum of 2MBytes of RAM

Highs

- Supports a huge range of picture formats
- Excellent picture conversion with lots of dither and palette modes
- Some useful image processing tools

Lows

- Image editing functions limited and clumsy
- Interface awkward and slow at times
- Slightly expensive for the number of features

79%

CONVERSION TABLES

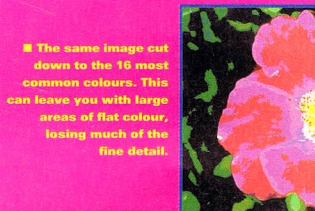
TrueImage is a bit of a whizz at converting between formats and picture types. Check these out.



■ The original image, a 730x485 pixel 24-bit scan. Highly detailed and colourful. The sort of image that is used professionally in DTP and computer graphics work.



■ The flower reduced to 256 colours using a picked palette (one that best reflects the colours used in the picture). The effect of losing over 16 million possible colours isn't as dramatic as you might expect.



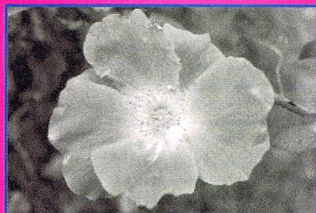
■ The same image cut down to the 16 most common colours. This can leave you with large areas of flat colour, losing much of the fine detail.



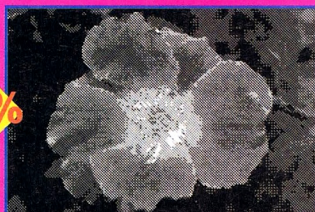
■ Again 16 colours, but this time using a dither pattern to produce the illusion of more colours, useable on any ST. Providing the image doesn't contain lots of different colours the results are good.



■ A 16-colour dithered greyscale. Surprisingly effective and displayable on an ordinary ST. If you don't mind losing the colour this is the best representation of the original that's possible in low resolution.



■ Down to two colours now. This is a 6x6 45-degree half-tone, one of ten dither patterns. You can also define your own custom dither patterns.



FAMILY ROOTS 2

Trace your family tree, using *Family Roots 2*. You might be related to nobility. But what if you find you're related to Michael Barrymore?

Tracing your family tree is an absorbing but complex pursuit. Hunting round old parish records and applying to Somerset House for copies of birth, marriage and death certificates, then gradually fitting the historical information together. But that's only half of it – all the data then has to be sorted before you can start to draw the tree. Floppyshop have just released version 2 of *Family Roots*, as if to answer your genealogical plea, and they reckon it's the ideal tool for the job. We looked at the original program in *STF* 37 and concluded that despite a few shortcomings (like the absence of a printed manual) it was the best, and in fact only, commercial program of its kind. So how does its newly-born offspring measure up?

Gettin' back to...

Family Roots 2 runs on any ST, in any resolution, and is very straightforward to use. It can be set to run automatically from your Auto folder if you want, and then load up the required set of family records, or you can start it from the Desktop.

It displays a workscreen enabling you to establish a record of each family member in the database, then link them up into the tree. The workscreen on which the family tree is displayed is like a huge piece of graph paper, 20,448 units wide by 6,400 units deep, and can accommodate up to 270,000 individuals, if you're feeling really inspired or well-

Get it...

If you already have the first version of *Family Roots* you can upgrade to version 2 by returning your original disk and £10 plus postage. In the UK postage is free, for Europe add £1, and for the rest of the world add £2. Keep a copy of your original data files though, or you won't be able to load them into the new version.

connected. In practical terms *Family Roots 2* can handle anything you're likely to throw at it – and once you've constructed your tree it can print out graphic copies of the tree itself (on to several A4 sheets), or text-based lists of the various family members and their relationships.

Because *Roots* isn't a GEM program there are no scroll-bars or drop-down menus, and you can't use Desk Accessories. This is unlikely to cause problems however – while you're involved in setting up your family records you're not likely to access DAs anyway. You do have to learn how to control the software in the absence of the familiar GEM menus, but the icons and keyboard short cuts are simple to use.

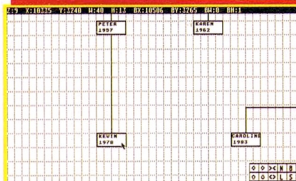
Although it will only probably appeal to a minority of *STF* readers, *Family Roots 2* is a good, professional

The extended family

How do you set up your family tree?

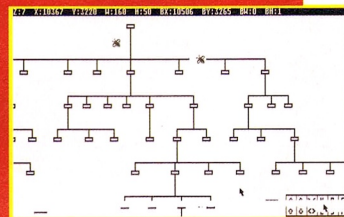
Forename: KEVIN	Surname: WOODBRIDGE	ABB
Mid Name(s): _____ Settled In: _____		
Sex: ☒ F	Marriages: 0	Children: 0
Broth/Sist: 0	Flags: A B C D E F	
Religion: _____	Occupation: _____	
Born: 13/6/1978	Place: IPSWICH GEN HOSPITAL	Parish: _____
District: DANEPARK	Town: IPSWICH	County: SUFFOLK
Bapt: _____	Place: _____	Parish: _____
District: _____	Town: _____	County: _____
Died: 0	Place: _____	Parish: _____
District: _____	Town: _____	County: _____
not used: _____	notes: _____	notes: _____

■ Enter some family members. For each individual press <N> from the main screen, and up comes a 'card' on which you input all their personal details: name, sex, date of birth, and other relevant information. Each record is given a unique reference number.



■ Once you have a few people entered you can link them up. Each individual card appears as a rectangle on the screen and can be dragged around using the mouse pointer. An optional grid display helps you position them neatly. The type of link (father-son etc) is established with a dialog box.

■ *Family Roots 2* shows you exactly what you've done so far in copious detail. Using icon controls or keyboard short cuts you can zoom in and out of the tree. The higher the magnification the more readable details you can see for each member. If you click on a person with the right mouse button their full info card appears.



■ Zooming right back out you can see the whole tree. It's one the *Family Roots 2* programmer prepared earlier, and is a good example of the best way to structure your tree.

Family Roots 2

£29.95 Floppyshop
0224 312756
Runs on all STs

Highs

- Creates large, complex trees
- Well thought-out
- Many useful features

Lows

- Not a standard GEM program

What else?

- PD utils: *Family Tree 2* and *Family Connections*, available from most PD libraries (list on page 52). A working demo of *Family Roots 2* is available from Floppyshop for £1.

83%

Following in the family footsteps

What has Floppyshop's newly arrived offspring got that its Dad didn't have? Here's a summary of the new features in version 2.

1 Virtually all printers can be used to output details from the program at various print resolutions.

2 Border feature incorporated. When you print your family tree you can add fancy user-designed graphics around the page.

3 As well as being viewable on screen, the results of searches through the database can now be printed out as hard copy on your printer (obviously).

4 Improved on-screen display of spouse's surname, birth dates, and definition of thickness of lines linking individuals.

5 Plus lots of other minor improvements and additions, all of which make the program easier to use and more useful. Which is what we all like to see.

Ladbroke Computing



33 Ormskirk Rd,
Preston, Lancs,
PR1 2QP

Ladbroke Computing International are one of the longest established home computer dealers in the U.K. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch to ensure that goods arrive in working order, offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest we do endeavour to offer consistently good service and backup.

All prices/specifications are correct at copy date 10/08/94 (while stocks last), and are subject to change without prior notice. All prices include VAT but exclude delivery.

How to Pay

You can order by mail, Cheques/Postal Orders made payable to Ladbroke Computing. Or give your credit card details over the phone.

Delivery

Postal delivery is available on small items under £40 (Normally £3, phone for details). Add £7 for courier delivery. Next working day delivery on mainland UK subject to stock (£20 for Saturday delivery).

Open Mon-Sat 9.30am to 5.00pm.
Ladbroke Computing Ltd trading as
Ladbroke Computing International.

Fax: (0772) 561071
Tel: 9.00am-5.30pm (5 Lines)

(0772) 203166

Printers



Star	
Star LC100 Colour	£119.99
Star LC24/100 Mono	£139.99
Starjet SJ48 Bubblejet	£210.00
SJ48 Ink Cartridge	£19.00

Citizen	
Citizen Swift 240 Colour	£250.00
Citizen ABC 24pin Colour	£179.99

Hewlett Packard	
HP Deskjet 520	£259.99
HP Deskjet 550 Colour	£429.99
HP Deskjet 310	£239.99

Thermal Colour	
Star SJ144	£369.99
● 144 Element print head	
● Colour 14 page per minute	
● 360 DPI resolution	
● Emulates Epson LQ860, IBM Pro Printer & NEC graphics	

Ricoh LP1200	£599.00
● 2Mb RAM	
● 400 Dpi	
● 12 months on site warranty	

Add £3 for Centronics cable and £7 for next working day courier delivery.

Data Pulse Plus

- Very quiet, no fan necessary.
- Dual SCSI Port
- Internal Power Supply
- Device number selector
- 2Mb PD Software free
- Free HD Turbo Kit

Hard Drives

- All Data-Pulse Plus Hard Drives are fully Auto booting/Autoparking and are formatted, partitioned and tested before despatch, ready to 'plug in and go'.
- Full metal case measuring 250mm x 290mm x 58mm (wdh), ideal for monitor stand.
- Only brand new, highest quality mechanisms used (we do not use refurbished or second-hand mechanisms).
- All drives come with full 12-months warranty and free expert help and advice over the phone.
- Configured with SCSI port for FALCON compatibility etc.

Data-Pulse + 170Mb	£349.99
SPECIAL OFFER DATA PULSE + 353Mb	
£399.99 NOW INCLUDING ICD LINK 2	
Data-Pulse + 540Mb	£699.99

Free HD Turbo Kit with all drives prices include ICD LINK for the ST.

Falcon 030

- 16MHz 32 bit 68030 Central Processor, 16MHz Blitter, 32MHz 56001 Digital Signal Processor.
- 144Mb 3.5" Floppy, up to 14Mb RAM. Displays 65536 colours from 262144 palette.
- 8 Channel, 16 bit, high quality stereo sound sampling.

FALCON 1Mb No HD	£499.00
FALCON 4Mb No HD	£699.00
FALCON 4Mb 64Mb HD	£799.00
FALCON 4Mb 127Mb HD	£899.00
FALCON 4Mb 209Mb HD	£999.00

SIMMS Upgrades

- All Aries RAM upgrade boards come packaged with full fitting instructions/test disk.
- | | |
|---------------------------|---------|
| 512K SIMM's STE | £7.99 |
| 2Mb SIMM's STE | £54.99 |
| 4Mb SIMM'S | £109.99 |
| 2 x SIPP to SIMM adaptors | £3.00 |

Hand Scanner

Zydec Hand Scanner

- 100,200,300,400 Dpi Resolution
- 1 Letter mode, 3 photo modes.
- 105mm scanning head.

Zydec Hand Scanner ST £99.99

3.5" External Drive

Ladbroke's 3.5" External Floppy drive. Includes own external power supply.
£57.99

ST Mouse

High quality 290 dpi mouse with microswitched buttons ST/AM.
£11.99

Marpet Upgrades

Marpet upgrades for the ST are 'plug in' and require no soldering. They are compatible with most motherboard layouts and come with full fitting instructions. These boards accept SIMM boards and are upgradeable at a later date. Please check that MMU and Shifter are 'socketed' before ordering.
Unpopulated Marpet board £24.00
See SIMM prices below.

STE Packs

1Mb RAM STE	£199.99
2Mb RAM STE	£254.99
4Mb RAM STE	£319.99

Phone for pack details.

PC Emulators



- Full installation instructions.
- XT or AT Emulation
- Check configuration before ordering.

PC Speed STFM (XT)	£49.99
PC Speed STE (XT)	£49.99
AT Speed STFM (8MHz)	£139.00
Falcon Speed	£POA

Repair Services

The Only ATARI Authorised Repair Centre in the UK

Our ATARI trained technicians can repair ST's in minimum time at competitive rates. We can arrange for fully insured courier pickup and return delivery of your machine to ensure its safety. We even have a same day service which will ensure your machine is given priority and subject to fault, completed the same day.

We can fit memory upgrades PC Emulators, Security devices, ROM upgrades, hard drives to Mega STE's etc.

We offer a Quotation service for £15 for which we will examine your machine and report back with an exact price for repair, if you do not wish to go ahead with the repairs then just pay the £15. However, if you do go ahead then the charge is included in the minimum charge.

Please note. The minimum charge covers labour, any extra parts are chargeable.

Quotation	£15.00
Minimum repair charge	£35.25
Same day service	£15.00
STFM(E) PSU	£34.99
1Mb internal drive	£39.99
A/B Boot switch	£4.99
TOS 2.06 + Switch STFM	£65.00
TOS 2.06 + Switch STE	£65.00

Courier Pickup	£11.00
Courier return	£7.00

Phone for price and availability of ST spares.

Monitors



Dataview Hi Res Monitor £109.99

High quality 14" SVGA Monitor with ST adaptor (includes sound). Fully compatible with all ST Hi-Res Programmes with tilt/swivel.

17" Multisync Monitor.	£629.99
.26 dot pitch.	
20" Multisync Monitor.	£759.99
.31 dot pitch.	

Colour SVGA Monitor £239.99

High quality colour SVGA Monitor, .28 dot pitch includes Falcon adaptor.

Microvitec 1438 MultiSync £289.99

The Microvitec Multi-Sync displays ST Low, Medium, High resolutions using ST switch box, compatible with FALCON & FALCON screen blaster using FALCON VGA adaptor.

ST Multisync switchbox	£19.99
Falcon VGA Adaptor	£9.99
Falcon ST monitor Adptr	£9.99
Philips SCART to ST/STE	£9.99
8833 MKII to ST/STE	£9.99



PROTEXT 6.5

The word processor market's hotting up, with three major releases this month. Can the latest version of *Protext* still deliver the goods?

A long time ago, a fledgling company called Arnor released *Protext* into a computing world devoid of any decent word processors. In no time at all, *Protext* established itself as a standard in word processors, making its way on both 8 and 16-bit formats. ST users, needing a way to write their

there is a wide range of paths a software developer could follow on the route to user-friendliness. Arnor chose a series of pull-down menus, making what is an otherwise daunting package easier to use.

Version 6.5

Exactly what's changed? Version 6

"Arnor's baby is nowhere near as user-friendly as the almost effusively friendly *Papyrus*"

In a classic 'hasn't time flown' kind of way, Arnor recently celebrated their tenth birthday, marking the occasion with a new version of the old favourite, aptly named *Protext* 6.5. The package now comes with more features than ever before, while still retaining the air of respect that a no-frills, vaguely techie word processor deserves.

I love *Protext* (nothing like a bit of first-person to trash that atmosphere). Not having experienced anything other than the original release version to any great extent, I was looking forward to seeing what the package had become. Having started with a simple command-line setup,

was really as close to perfect as *Protext* could ever get (except for the fact that it didn't offer WYSIWYG viewing), and Arnor have still found things to update and improve. The majority of

changes concern automatic options, such as expansion and correction. *Protext* 6.5 happily sits and waits for you to type predefined abbreviations, then expands them into the full text (which you set before you start). Automatic spelling and type correction are two functions that work together. For example, when typing, if you start a sentence with a lower case letter, it'll be corrected; the same if you make a spelling mistake.

Fortunately, the function only butchers words you tell it to, storing a library of words you regularly misspell and replacing them with the equivalent



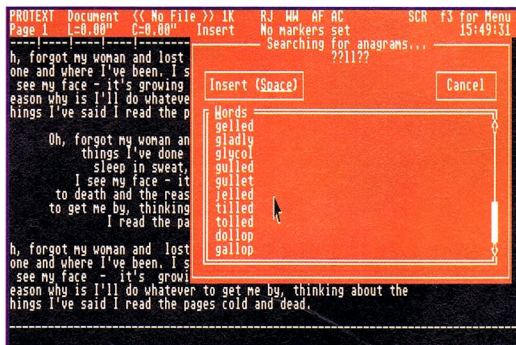
■ The pop-up pop-up menu bar, that pops up. Nothing is obvious. Nothing is given away. There could be an entire comms package hidden away in here, and no one would ever find it. That's what you call deep.

lents you've set. Problems start when you're an incredibly bad typist – unless you predefine every permutation of every word you mess up, you'd be wasting your time turning the spell-checker on. It's obvious why it's been done this way, though – a function that replaced all unrecognised words automatically would be a death-wish.

Too many cooks...

In his subscribers' editorial this month, our illustrious editor talked briefly about the problems with three

word processors being released in the same month. This isn't just a problem for users, though – *Protext* 6.5, wonderful though it is, would still have problems coming up against packages like *Papyrus*. Though everything you'd want in a word processor is supported, Arnor's baby is nowhere near as user-friendly as the almost effusively friendly *Papyrus* (reviewed on page 46). The mouse-driven text selection system still needs work, and doesn't seem to have been fully incorporated into the interface – you can highlight text for copying or moving,



■ Damned thing can solve anagrams, though. Which is more than you can say for most of the people round here. Call themselves wordsmiths...

Fonts (ahem)...

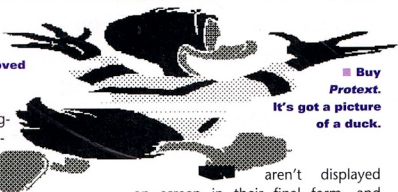
Hmm, yes. The thing about *Protext* is that, because it's not WYSIWYG or comprehensive or anything sensible like that, it doesn't exactly support huge amounts of extra fonts. This might seem like a bit of a bummer, but in fact things like type styles are handled in the same way as *Protext* handles everything else – through

control codes and technical things. This means that with a bit of jiggery-pokery and a table of Epson codes, you can get your printer to handle as many fonts as you need, communicating font changes via even more control codes. You'll need tenacity, intelligence, vision and patience to do it, but we've got faith in you.

■ The paragraph formatting involves several different keypresses. There's just no justification for that. (That's it, you're fired – Trent)



■ "By jove - is that a *Protext* page over there in the distance?" Jennifer loved using her binoculars.



■ Buy *Protext*. It's got a picture of a duck.

but there's no drag-and-drop, no type-over, nor any of the other functions you'd expect from a package that's had more upgrades than Cher.

Wimps not admitted

We could sit here and find fault with *Protext* for not being user-friendly enough till the cows come home, and in comparison to the other packages reviewed this month its support for new users is poor. But *Protext* was never designed to be overtly friendly. *Protext* isn't for people who want to write a nice letter to their grannies. *Protext* isn't for people who type at three words per minute. *Protext* is for people who know exactly what they want from their word processor and are determined to get it. *Protext* is for power users, who don't want a smooth package in which pretty boxes are substituted for total control.

As far as complex and innovative document processing goes, *Protext* is definitely in the lead. As long as you're prepared to spend a few hours getting to grips with the slightly strange way of working (pop-up menu bars that, themselves, pop up and odd functions giving access to your Desktop) and the complete lack of guidance as to what the mysterious letter combinations in the status border mean, you'll find a deep, complex package. Under all the layers of unfathomable key-presses and in-document control codes, that is.

The main criteria for using *Protext* is technical competence. If you know your way around an ST and don't think an unfriendly interface would hold you back, you'll bury the competition with the results you can produce. If, however, you're some drooling gaffer with all the brainpower of a marriage guidance councillor and you bought an ST because of the nice, biblical reference, you might not get on with *Protext* 6.5. **stf**

SIMON FORRESTER

"Protext is for people who know exactly what they want from their word processor"

This system of unrepresentative editing is unfortunately still used in *Protext*, though a graphical page preview has been added, enabling you to view pages from a loonng way off, but there's still no way of looking at a page in any decent resolution.

The main criteria for using *Protext* is technical competence. If you know your way around an ST and don't think an unfriendly interface would hold you back, you'll bury the competition with the results you can produce. If, however, you're some drooling gaffer with all the brainpower of a marriage guidance councillor and you bought an ST because of the nice, biblical reference, you might not get on with *Protext* 6.5. **stf**

Protext 6.5

£99 Arnor ☎ 0733 68909
STs and TTs

Highs

- Powerful when you get the hang of it
- Simple enough to be versatile

Lows

- Still no WYSIWYG option
- A reet pig to master

85%

Coming soon

from the people who bring you

ST Format

It's an **essential** purchase

You just might not

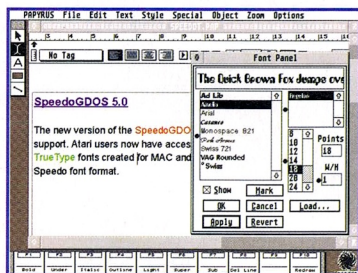
realise it yet...

SPEEDOGDOS V5.0

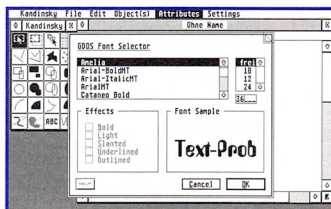
Atari have released an upgrade for the SpeedoGDOS outline font system. *ST FORMAT* whips out the magnifying glass and investigates.

Atari releasing a new piece of software is a rare event indeed, but SpeedoGDOS 5 demonstrates that decent support for the ST still exists. The new version of this outline font system for all Atari computers offers easier installation and enhanced import features, but how well does it work with the software it's designed to work with?

SpeedoGDOS 5 is the latest in a family of software which began life as GDOS, an operating system extension that supplied bitmapped fonts to GEM applications. The original SpeedoGDOS (reviewed in *STF* 50, scoring 92%) broke the mould by introducing what are known as outline or vector fonts, which can be scaled up or down without the blockiness associated with bitmaps.



■ Papyrus Gold shows off its SpeedoGDOS handling on the Falcon. Impressed? We were.



■ Kandinsky copes just fine with SpeedoGDOS. Some other programs aren't as accommodating.

SpeedoGDOS is best installed to a hard disk, although it is also possible to create a floppy disk that will boot up the software on any machine. As with previous versions, at least 1MByte of RAM is necessary for serious use, which makes SpeedoGDOS particularly useful to Mega ST, TT and Falcon owners. A full installation of all fonts and printer drivers requires 3MBytes of disk space.

An air of mystery

What exactly can you do with SpeedoGDOS? Word processors, DTP applications, CAD programs and even drawing and painting tools like Atari's own *Hyper-Point* all support GDOS to some degree. However, compatibility varies, and not all your software is likely to work first time. Unsurprisingly, more recent applications offer better SpeedoGDOS support than

Ad Lib

Allegro

Amelia

Cataneo

Cooper Bitstream

Park Avenue

VAG Rounded

American Garamond

Dutch 801

Σμβολ MonO (Symbol Mono)

⌘+⌘⌘⌘⌘⌘⌘ (MoreWingbatsSWC)

Monospace 821

Swiss 721

■ These are the Bitstream fonts actually supplied with SpeedoGDOS 5.

those written before the standard was introduced.

A quick tour of the disk box confirms the story: *Kandinsky*, *MasterCAD* and *Papyrus Gold* run SpeedoGDOS 5 with few problems, whereas *Hyper-Point* 2.0 and *Master-browse* 4.5 have some difficulty. This doesn't reflect badly on either Speedo or the other software – it simply takes time for programmers to cater for the new features. SpeedoGDOS 5 also seems to require more memory and system resources than version 4, which could explain some of the quirks.

Wider Implications

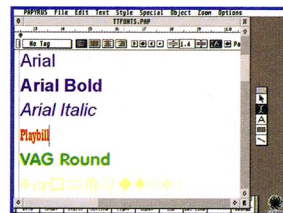
If SpeedoGDOS 5 is no more compatible with existing software than its predecessor, then what exactly are the benefits of upgrading? Well, apart from the easier installation (a proper Install program, at last), SpeedoGDOS 5 uses PostScript Type 1 and TrueType font formats (see boxout). This enables you to pick and choose from literally thousands of pre-designed fonts from public domain libraries, bulletin boards, and even other (non-Atari) computer systems.

As far as performance goes, the speed of printing is unchanged. *Papyrus Gold*, for example, takes two minutes to print the same page using either version 4 or 5 of SpeedoGDOS. Quality of print and screen display are both also similar.

Although SpeedoGDOS 5 doesn't offer significant performance benefits over previous versions, the new font support alone justifies the upgrade. Having access to TrueType and PostScript formats gives a greatly enhanced portability to your documents through the use of industry standard typefaces.

If you don't already have SpeedoGDOS, the package is still worth the full price, but you should check that your favourite applications support it. While any program that can use GDOS should work with SpeedoGDOS 5, there's no guarantee. *ST FORMAT* will keep you up to date with SpeedoGDOS compatibility on all relevant products as they are reviewed. **stf**

DUG ARMSTRONG



■ SpeedoGDOS 5 can now import TrueType fonts directly into your applications. Where's Arial Ultra?

SpeedoGDOS v5.0

£59.95 new or £29.95 for an upgrade
Compo = 0487 3582
Free with new Falcons
Works on all Atari, 1MByte or more preferred

Highs

- New import formats – PostScript and TrueType
- Proper install routine
- Lows**
- Older software might not run with it
- Requires more RAM than version 4

73%

JARGON BUSTERS

Font

A particular style of text, drawn from a general letter design or typeface, for example Baskerville 16 point bold. Used as a generic term to describe entire typeface families. Fonts can be decorative, functional, even pictorial.

PostScript Type 1

An industry standard font format widely used in the Macintosh and PC

communities. There are thousands of designs available commercially and in the public domain. SpeedoGDOS 5 only requires the .PFB file associated with this format.

TrueType

A font format made popular by Microsoft Windows. Again, the popularity of Windows has ensured a large variety, available from many sources.

SpeedoGDOS 5 needs only the .TTF file to import TrueType fonts.

Printer Driver

A software module that configures a program to print on a particular model of printer. SpeedoGDOS comes with a comprehensive set of drivers covering many major brands, including HP Deskjet 560C, Canon BJ-10e and HP LaserJet 4.

the **internet** magazine

.net

Connect yourself to a world of information!

(No hackers, crackers or mouse potatoes. Guaranteed.)

You've read all about it. The Information Superhighway. Cyberspace. The greatest development in information technology since the telephone. Hell, since the printing press. And you want to get involved.

But how? It's a strange new world out there, packed with computer geeks, infonauts, self-styled infobahn warriors – if anything was guaranteed to put you off, it's this lot.

That's why, here at *.net magazine*, we're a jargon-free zone. We want to show you, simply and easily, how to get onto the Internet, and how to get the most out of it once you're there. Plus, we've loads more advanced stuff for existing netsurfers too.

After all, the Internet's for everyone. If you want to get involved – and you should – make a note of the date below...

the **internet** magazine
.net

An essential purchase all round, really.

First issue on sale • Wednesday • **October 26**

Come and see us at **FES '94 Oct 26-30**, Earls Court 2

Check out the Supplement on issues of PC Format, MacFormat, and Amiga Shopper in October

And see you on the Internet...



Looking for an easy way to add a touch of individuality to your text? Compo's new font packs contain 200 text styles.

[illegible]

■ Wouldn't you know it? Bloody football fans have invaded the mag.

gram, dealing with image formats as diverse as Kodak PhotoCD, for no instantly obvious reason. Why it couldn't have contained a font handler or even a font designer isn't clear – a graphic converter seems to have been deemed infinitely more suitable. Back to those other 11 disks, then.

The Office collection is, as you'd expect, the more reserved of the two

packages. Although it contains 100 different lettering styles, it deals almost exclusively with the more reserved, business-like fonts. Which is a shame – it'd be nice to receive an official letter built up entirely of different sized bananas, but this hasn't been deemed appropriate for people in suits at this time.

The Gold collection is a little more varied, with occasional fonts lending themselves more to hippy album covers.

■ The Office collection, for people who'd much rather sit around in suits and look powerful. They all look the same, though. (*The people or the fonts? - Jill*)

■ The Gold collection, containing all manner of fonts from the hideous to the criminally insane. Taste is most definitely not an issue here.

Simple – look at this page. You'll notice that every element on it – the headline, strapline, captions, body text, subheadings, page numbers, and page bottoms – is in a different font. Now imagine if everything on this page was in the same lettering style. Think about it. You wouldn't even bother reading it – it'd look like a cheap advert. Probably the easiest way to attract someone's attention.

mark a difference between two sections of text or even just liven up an otherwise terminally dull page is to use a selection of different fonts, such as those supplied on the Office collection. To be honest, you couldn't do the same thing with the Gold collection unless you wanted someone to come along to your circus, because some of the fonts are frankly in bad taste.

File Edit Format Window Apple Help

THAT'S WRITE Version 3.15

Pages: 3 Lines: 985 Strides: 525

Free Memory: 935 KByte

OK Cancel

you have a suitable word processor, and you need lots of fonts, this is as cheap and simple a way of getting them as you're likely to find. **stf**

SIMON FORRESTER

Throughout this review, you'll find references to a package called SpeedoGDOS. Although these packages contain fonts only for SpeedoGDOS, this isn't such a restrictive thing – all SpeedoGDOS fonts can be used on all applications boasting GDOS compatibility, which includes such lovelies as *Papyrus* (see page 46). So check your word processor. You can probably use these fonts after all.

Highs

- 100 varied fonts
- Easy to install

Lows

- Some of the fonts are *really* tasteless
- 50 notes is a little steep

What else?

You could go to a computer centre and request as many fonts as you liked, but they wouldn't be this cheap or easy to install.

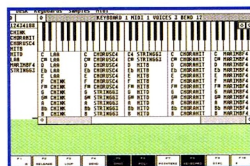


CLARITY FALCON V2

The first release of the Falcon sampling package was lacking in a few areas – so has this upgraded version finally got it all right?

Way back in July 1994, in *STF 60*, we reviewed Microdeal's *Clarity 16* for the Falcon, and, let's be frank, we were disappointed. We knew the company could make acclaimed sampling hardware-software bundles: *Replay 16* for the ST is testament to that. But they seemed to have slipped up – even been downright complacent – when it came to big brother.

Clarity 16 v1.16 for the Falcon was, for the most part, *Replay 16* ported directly from the ST. Microdeal put right some of the awkward quirks of the original (like the pointer not moving through a soundfile as it played) but not others (soundfiles don't automatically obtain an .AVR extension when you save them, so if you don't add one, they won't show up in the AVR sample file directory later). All controls for the modules within *Replay 16* – the sample editor, DrumBeat drum machine emulator and MIDIPlay keyboard organiser and interface – were copied on the Falcon. Okay, the DrumBeat front end does look a little dated and basic, but the overall design was satisfactory, so why bother to change it?

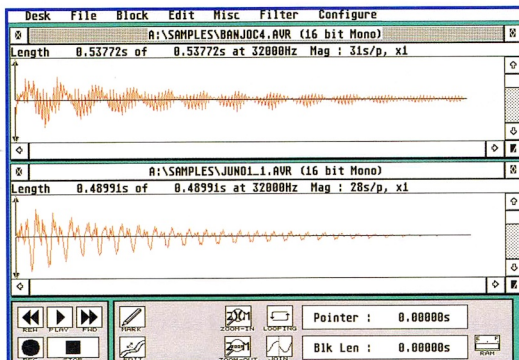


■ This is the main screen of MIDIPlay, which enables you to play your samples through an external MIDI keyboard or sequencer.

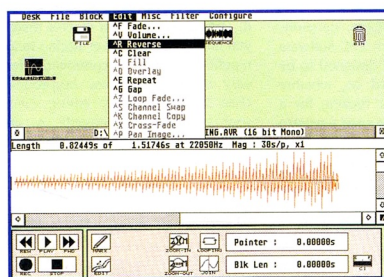
What Microdeal also did was to copy wholesale the mono example samples supplied to get you started with *Clarity*. These did not, however, play back on the Falcon unless they were converted to stereo files first – which was most disconcerting for the newbie. What's more, the MIDIPlay program, which turned your Falcon into a four-note polyphonic MIDI sound source, was unpredictable, unreliable, unusable even.

Happy bunnies

So to version 2: are we happy bunnies now? First, Microdeal have fixed the mono/stereo file problem. Now the glorious sonorities of a 16-bit xylophone, bass twang and Roland Juno synth, plus all the other samples on the enclosed dedicated disk, can be loaded and played through head-



■ As these two examples indicate, samples are displayed in individual windows. I wonder how Juno and Banjo would sound together?



■ The Edit menu enables you to do all sorts of weird and wonderful things to your samples. You can even reverse them to create an entirely new effect.

phones, or the internal speaker with-out any fuss. Full marks.

The DSP (Digital Signal Processing) effects work perfectly for adding room ambience or echo to your audio, and the filters – used to remove specific bandwidths of frequencies – are fast and efficient. We had problems with a crashing computer when we tried to calculate a graphical model of the audio using the original version of *Clarity's* FFT function: but no such probs this time.

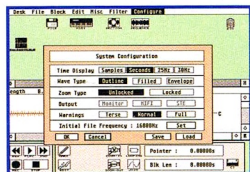
You still can't monitor the audio and observe it as a waveform through the oscilloscope simultaneously with v2 – perhaps you never will.

Lack of full synchronisation remains a sore point. One of the strengths of *Replay 16* was that the samples created therein could be triggered from Gajits' *Breakthru*

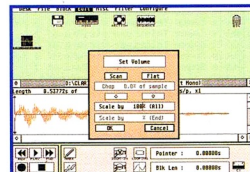
sequencer, integrating MIDI messages and sampled sound in hi-tech harmony. *Breakthru* for the Falcon looks as far away as it ever. You can synchronise DrumBeat to an external MIDI sequencer, and bingo, your Falcon becomes a four-voice drum machine. Presuming you've got an external sequencer, that is.

There are still problems with *Clarity Falcon*. Some functions prove a little less than stable – the three-dimensional frequency graph for example – and the resultant nerves stop the package from achieving its full potential. Yet if certain areas of *Clarity* still fail to deliver, chew on this. Here you have a direct-to-disk recording package, stuffed with functions for mangling your sound, all for just under £100. Can't be bad. **stf**

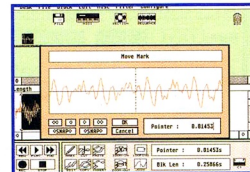
ADAM PEARCE



■ Use this dialog box to set up *Clarity's* work environment to your specifications. Save these options, and you can skip the process next time you come to use the program.



■ This option enables you to alter a sample's volume to your exact requirements. Here in the *STF* office we won't tolerate anything lower than 'deafening'.



■ Select a block of the sample to edit, then move it round using the Move Mark option. This is especially useful when lining up your block to a precise requirement.

Clarity 16 v2 for Falcon

£99.95 Microdeal
or 0525 718181

Highs

- Good price
- Some improvements over original release

Lows

- Still a little flaky at times

83%

EDITH

**A female text cruncher?
We investigate *Edith*, the
text editress, and find that
she more than holds her own
against the competition.**



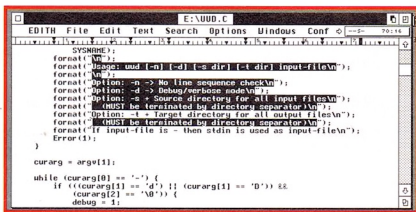
We've had text editors by the thousand for years now, so what makes an editress any different? If it follows nature, the ladylike equivalent will be faster and more efficient, certainly. *Edith* is an editor from ZFC Software in Amsterdam, and is designed to be usable from the word go, whether you're a programmer looking for a new editor, or you just need a reliable tool for occasional use.

Babe-licious

As a programmer's editor *Edith* is stunning. Automatic indentation means your source listings are formatted properly without thinking about it. The Kurzels and text macros mean you have a handy way of storing long repetitive program commands for easy recall with a few keypresses. Used as an everyday editor, *Edith* soon becomes indispensable. As an Accessory it's always there, whatever

you're doing. It isn't a word processor however, and printing is limited to a straight ASCII printout without fonts or formatting, in either one or two columns.

Up to six files can be open at one time, and *Edith* can be set so



■ When run under MultiTOS or as a Desk Accessory, *Edith* doesn't replace the main menu - it provides its own equivalent inside the actual text window.

■ Using the mouse you can mark blocks of text anywhere you like, even completely separate from each other.

columns - you can cut the address from the right-hand side of the page without disturbing the left. Separate blocks can be marked at the same time by holding the <Shift> key while dragging. Search and Replace is easy, and removing those odd characters from files is easy thanks to the pop-up ASCII chart - just click on a character to transfer it to the active window.

The only problem we found was when using the word-wrap - occasionally a new line would be started with a space. Formatting didn't clear it, and it had to be deleted manually, but this is a minor problem and soon to be cured. Apart from that, as an all-round editor *Edith* should find a home for itself whatever you do with your ST. **stf**

FRANK CHARLTON

Support

Edith is supported and registered in the UK thanks to the efforts of two men - Graeme Rutt and Joe Connor. You no longer have to send money abroad to register many excellent European Shareware programs like *Edith* and *GEM-View*. Write to them for full details of the other packages they support.

Edith

£35 (£22 until end of Sept)
Graeme Rutt, 4 River
Terrace, Washbank Rd,
Cambs PE19 2TE
ST/TT/Falcon, 512K

Highs

- Configurable to suit anyone
- Fast and easy to use
- Powerful text manipulation

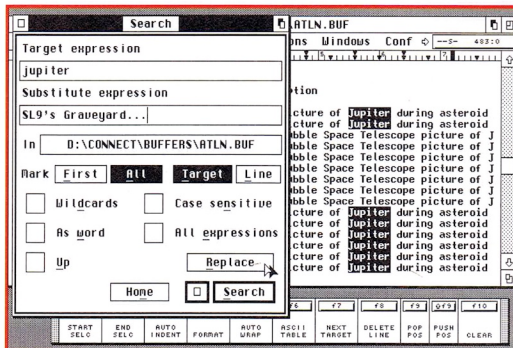
Lows

- Slightly bugged word-wrap

What else?

- Everest, from PD libraries (see list on page 52).
- Neat GEM editor, but lacks the polish and power of *Edith*.

87%



■ Search and Replace functions are essential in any editor, and *Edith* offers an abundance of them, even offering wildcard searches.

ZFC pride themselves on producing friendly but powerful software that meets all needs, and with *Edith* they've certainly succeeded. It's a good-looking program, with all functions available from the mouse, keyboard, or a combination of both. The cute name is deceptive - there's a lot of power hidden under the surface. *Edith* is happy under any variation of TOS, from the most basic ST right up to the latest Falcon version, and happily takes advantage of multitasking environments like MultiTOS and Magic. Dialogs, alert boxes and even the built-in file selector all appear in windows, making program switching a snap. Files and windows can be 'iconfied' under MultiTOS, clearing the Desktop, while your files remain a mouse-click away.

STORM TRACKER

Something wonderful has just happened in the soundtracker market...

Just when you may have thought that Digit (STF 52, 91%) had the ST soundtracker market completely sewn up, along comes *Storm Tracker* to make you think again. *Storm Tracker* is a completely GEM-driven, MOD-compatible tracker unlike anything previously seen on the ST. It utilises a score-based environment and it's compatible with all STs, TTs and Falcons.

The first thing that surprises you about *Storm Tracker* is its friendly, GEM environment. Gone are the

"At last you can use virtually any sample and be sure of tuning it in with the others"

quirky and fiddly low-resolution interfaces of *ProTracker* and *TCB Tracker* (both PD) and in comes an intelligent, predictable user interface that won't phase anyone. You have full access to your normal file selector and Accessories so there's no need to boot your machine specially for *Storm Tracker* - simply run the program from your Desktop.

Storm Tracker professes to run under MultiTOS and MagiC but we had a few problems when using it with MagiC, and it refused to have anything to do with Geneva. For safety, you'd be best to use it with your standard TOS, because any attempts to multitask are reasonably likely to end up in bombs.

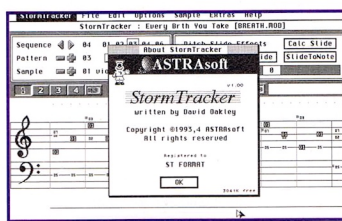
A word about samples

Storm Tracker handles samples in many formats (unlike *Digit*, which only handles SAM files), and you can convert samples using the Sample screen if they need tweaking. Full provision is also made for changing the pitch or frequency of samples: they can be tuned or pitch-shifted to where you need them. Because lots of attention has been paid to this feature the system is incredibly easy to use. At last you can use virtually any sample and be sure of tuning it in with the others. *Storm Tracker* uses samples exclusively, with no access to the sound chip at all.

Plenty of short cuts have been provided to make life easy in the fast lane, and give the program a great feel. The most useful is the Spacebar, which stops and starts the music for you.

Let's make some music

Simply select a sample and one of the four tracks and enter notes by clicking the left mouse button. If you make a mistake you can change the notes by clicking on their new position. Notes can easily be shifted, replaced, added or removed with a few simple clicks. If you've used *Quartet* (included on Cover Disk 58 - see page 85 if you missed it) you'll find this familiar, although the interface is handled a great deal better in *Storm Tracker*. There's no facility to play music in real time (unlike *Digit*), and you'll need to concentrate on getting the notes to look



■ A brand new tracker program for your ST. Is it Christmas already?

ately attractive to past users of *Quartet* and to those musicians among you who understand the stave. Even if you have no knowledge of stave layout, however, you should find *Storm Tracker* easy to pick up. The

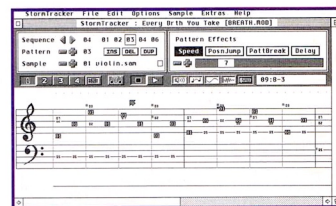
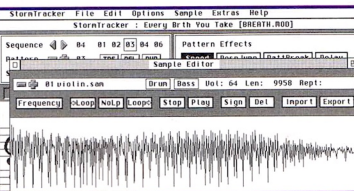
extended compatibility with virtually every computer Atari has made and sensible price make it a competitive package. Replay is of a high standard, although it would have been nice to see some treble and bass controls built in. If you already have *Digit*, you may well benefit from owning *Storm Tracker* as well, particularly with its superior compatibility. **stf**

ANDY CURTIS

■ Change the sample, loop it at a different point or save it to disk. The Sample section does it all.

right and then auditioning what you have done before making any corrections. Once you have entered the notes there is a wide range of processing available to you: sliding notes into each other, echo effects and volume effects are straightforward to add and there are facilities built in which enable you to work on larger blocks of notes.

Storm Tracker is a highly competent package, which will be immedi-



■ *Storm Tracker* displays your music on a conventional notation stave. It looks tricky but you'll soon get the hang of it.

Storm Tracker

£24.95 ASTRAsoft

0782 335650

All STs, TTs, Falcons

1MByte or more

Highs

- Beautiful GEM interface
- MOD-compatibility
- Superb sound

Lows

- No STe sound controls
- Unstable multitasking
- No real-time note entry

What else?

Digit £29.95 from CGS

081 679 7307

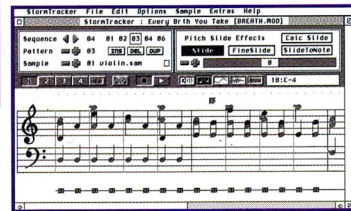
Hard to separate *Digit* from *Storm Tracker* in terms of ease of use and sound quality.

88%

■ Like all the best programs there is a keyboard short cut for almost every function of *Storm Tracker*. Learn these and you'll soon be skipping round the program at warp speed. Hurrah! (Calm down - Jill)

■ A few defaults here, the odd path name there... All much as you'd expect from a Preferences page.

■ If you prefer it, the program can even display notes as you would expect to see them in sheet music.





STEREO CAD

Give your ST a sense of depth with a new stereogram creator, and spend the next few days going cross-eyed. The question is: can you see them?

What do you mean, you've never seen a stereogram before in your life? You obviously haven't been on the planet for long – as consumers, you're bombarded with the things daily, either in the direct form of pictures and posters, or the indirect form of advertising. What level of maths is behind the technique is anybody's guess, but you ST users don't have to worry about things like that, because JCA Europe has just released a package to do the job for you.

First things first, can you see them? There are a few on this page, so just stare at one, and go cross-eyed until the pattern laps over itself, one step along. Without uncrossing your eyes, relax them, and look at the image as if it were a normal picture.



■ There's even a pattern designer.

You should see a section of the picture drop backwards – that's the clever bit. If you can't see them, you'll probably never see them, and you're probably convinced it's just some massive marketing ploy to fool the public into hallucinating. In that case, don't buy *Stereo CAD*, because you'll just spend hours drawing doodles and staring vaguely at screens of unintelligible mush. Much as we do around here, most days.

Stormin' Norman

The rest of you, however, are in for some fun. *Stereo CAD* is a storming little utility, in which you start by defining objects and shapes. The software automatically draws geometric shapes of any size and dimension, then positions them on the screen. If you really can't cope with things like geometry and degrees of rotation, and you're fairly handy with a mouse, there's a freehand doodling option.

The system works by first defining shapes, which can be anything from recursive geometric shapes, through simple outlines and freehand plates, to imported images. These shapes are then tagged to objects, in a simple numbering sort of way. Things begin to get impressive when you then place those objects on to

■ Can you see what it is yet?

the image, choosing position, scale, and depth. With about a minute of processing, this new 3D scene can be turned into a stereogram.

Probably the most impressive thing about *Stereo CAD* is that absolutely everything is mouse controlled, making for an excellent user interface. The main screen consists of four boxes in which the action takes place, although you might occasionally need a keyboard for typing file names (but stop being so picky).

As for power, you're not likely to come across a task that this package can't perform. With more features than you'll ever need, *Stereo CAD* gives you full control over your creation, enabling you to create backdrops, import images, design finishes (the pattern the whole thing works on) and much more. You can either give your pictures depth, 'digging' the shapes into the background, or you can make them stand out in the foreground in steps.

Doodle doo

The only real fault the package suffers is in its freehand drawing mode. New users would have a much easier time of it if there were a series of brushes, fills, and other arty type things. But this isn't a major let-down – you can still doodle – but perhaps version two might cure this minor problem.

Stereo CAD is an excellent package – it's user-friendly, versatile, and it won't take you long to get the

Alternative

Well, if you look back to issue 59, you'll see a PD review of *Auto Stereogram Creator*, which is available from LAPD. Unfortunately, it only scored 7%, a mark that was, in conflict with the review at the time, harsh. Call it 30%, but go and get *Stereo CAD* instead anyway, 'cos it's much better.



■ A doodle pad section for... stuff.

hang of it. It can be daunting at first – the layout and structure of the menus don't exactly welcome first-time dabblers, but a few minutes with the manual and a few trial runs later and you should have got the hang of what you're supposed to be doing. This is really a package for the more experienced user, but first-timers shouldn't have too much trouble getting their images working.

If you really want to mess around with things like stereograms, *Stereo CAD* is the package for you. If you're not interested in churning them out by the bucketload, the price tag may be a little too high. **stf**

SIMON FORRESTER

AND THEN...

Let's say you went to town and bought Stereo CAD – you'd now have a perfect licence to... to... erm, what exactly can you use this thing for?

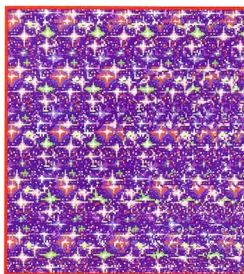
■ Wallpaper – get rid of those people you don't like by creating the words 'go away' hovering two feet away from the wall.

■ Animations – digitizing a black-and-white image frame by frame

would be easy enough, as would running each one through *Stereo CAD*. Linking them together and displaying them in sequence wouldn't be all that taxing, either.

■ Manchester – that'd teach them. They'd be gathered in groups, thousands strong, staring silently into shop windows. It'd be great.

■ Weaponry – the East-Asian security forces have recently developed the holographic bullet for riot control, making people fall over even if they're not peppered with lead.



■ This could be a picture of anything at all – you don't know.

Stereo CAD

£29.95 JCA Europe
30a School Road, Tilehurst,
Reading, Berkshire RG3 5AN
Runs on any ST

Highs

■ Damned good interface

■ Versatile

Lows

■ Limited doodling functions

75%

HEAR THE **FM**CD – ESSENTIAL LISTENING FOR ALL MUSICIANS

FUTURE MUSIC

MAKING MUSIC WITH MODERN TECHNOLOGY

WHICH 4-TRACK?

Discover the right one for you
– four top contenders on test

Revealed – the basics
of sequencing!

plus

- Easy-to-follow tutorials
- Orang and Flood profiled
- Your problems solved
- Buying advice



**On sale
Tuesday 27
September**

24
pages of
reviews

Roland SC-88 tone module

Tascam M2600 mixer

MIDI guitar files

Yamaha RY20 drum machine

and much, much more...

PAPYRUS GOLD



Oh, not another word processor! Nope, this is a document processor, and a bleeding good one, too. What's so special about it?

With the withdrawal of Calligrapher Gold from the market recently, there has been a void as far as document processors are concerned. HiSoft, never slow off the mark when a good business opportunity appears, have now released Papyrus Gold, which doesn't so much replace Calligrapher (STF 51, 88%) as give it a good hiding in the document processor stakes.

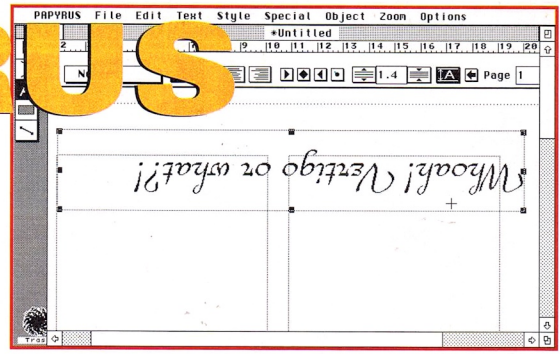
Papyrus is bursting with so many features that it would take pages to list them all. You need a minimum of 2MBytes of RAM, a monochrome monitor and a double floppy drive to run it on your ST, or 4MBytes on a Falcon. SpeedoGDOS v5 (reviewed on page 38) is also recommended if you want Papyrus to use outline/vector fonts rather than being restricted to bitmap GEM fonts.

And it comes on just three floppy disks, proving that power doesn't necessarily require large amounts of disk space (only 1.5MBytes, in fact). It's easy to install on to your hard or floppy drive by following the on-screen instructions. HiSoft have gone for a manual, providing a complete run-down of all the features available, rather than an on-line Help option.

"Papyrus is bursting with so many features that it would take pages to list them all"

Features abound
Papyrus' two most impressive features are also its most basic. The text editing tools are reminiscent of Apple Macs - text is selected simply by dragging the mouse over the letter, word or section of text that you want to amend (the keyboard short cut <Ctrl> <A> highlights all the text at once). Once selected, the text can be cut, pasted or copied as required, or you can overwrite it once highlighted

editing tools are reminiscent of Apple Macs - text is selected simply by dragging the mouse over the letter, word or section of text that you want to amend (the keyboard short cut <Ctrl> <A> highlights all the text at once). Once selected, the text can be cut, pasted or copied as required, or you can overwrite it once highlighted

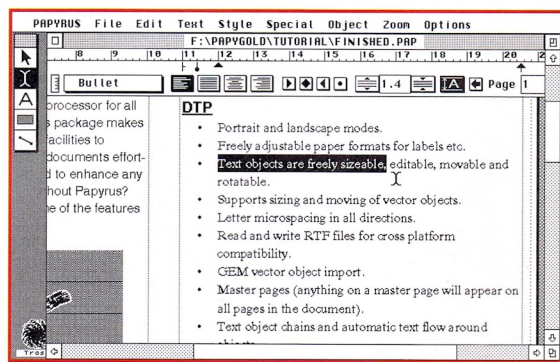


■ Papyrus rotates text, flows text round graphics, bends text in circles and meets all your more conventional document processing needs too. Coo.

simply by typing in its replacement, without having to pressing .

The second impressive feature is Papyrus' use of dialog boxes. With many programs, you change your parameters within the box, then click on OK to see the effect. If you don't like the result you must then re-open the box and go through the whole palaver again. With Papyrus, each box

graphical frames inside the text frame, wrapping the text around them with the minimum of fuss. A separate option even enables you to rotate frames in 90-degree shifts, sending your pictures and text all over the place. Finally, an anchor option links frames together (for example, a picture relating specifically to a paragraph of text).



■ Unfortunately, even with Papyrus you still have to use a mouse to highlight text. Apparently a direct brain-software interface is "on the way".

comes with a default Apply option enabling you to view your amendments with the box open. This is especially useful when you're experimenting with the size and position of frames, or altering the spacing of specific characters.

Frames (but not lenses)

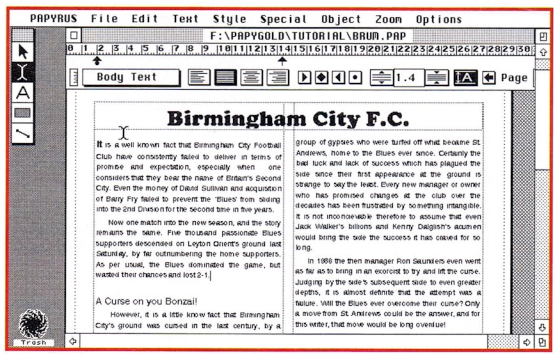
Papyrus uses frames for manipulating text and graphics. You can easily mix the two in a document, flowing the text around the pictures just like a true DTP package.

Rather than squinting at the screen when placing frames, Papyrus features an Attributes dialog box which you use to lay a frame exactly in place on screen by directly entering its x and y co-ordinates; you can then re-size it in the same way. Within the same box you can position

It doesn't end there!

Papyrus also enables you to create tables, either containing data imported from elsewhere, or empty ones ready to be filled at a later date. And there's a microspacing option, which enables text to be placed anywhere on the frame - you can bend words in a circle, or create mathematical formulae, for example.

Papyrus is capable of utilising a wide variety of font and graphics formats. Two standard bitmap fonts, GEM and Signum!2, are supported, and if you have SpeedoGDOS installed you can use a huge variety of outline fonts - there are plenty available at a reasonable price (200 reviewed in this issue alone, see page 40), and there will be for a long time to come. The previous, supposedly definitive document processor, Calli-



■ You can write all sorts of drivel with Papyrus. Here Nick makes an ultimately doomed attempt to explain away his favourite footballing side's many shortcomings. Ancient curses indeed.

AND THERE'S MORE...

There are loads of features in Papyrus Gold just waiting to be discovered by you on your intrepid travels into Atari's premier document processor. Here are ten of the best.

- 1 Text-wrap and frame manipulation give it true DTP power.
- 2 Intelligent use of dialog boxes makes polishing your documents soooo much easier.

- 3 Text editing à la the Apple Mac. Couldn't be more straightforward.
- 4 Uncomplicated system for manipulating fonts and styles.
- 5 Compatibility with a wide range of industry standard fonts, including SpeedoGDOS.
- 6 Impressive turn of speed when redrawing documents, compared to previous WPs.

- 7 Create coloured text (with a colour printer) on the ST and dazzle everybody.
- 8 Easy to create tables for those power meetings in the office.
- 9 At £130 (or £90 for an upgrade), it's competitively priced.
- 10 The way in which it all hangs together in a coherent whole.

rapher Gold, relied solely on its own standard of fonts, which all but disappeared with *Calligrapher's* publishers earlier this year.

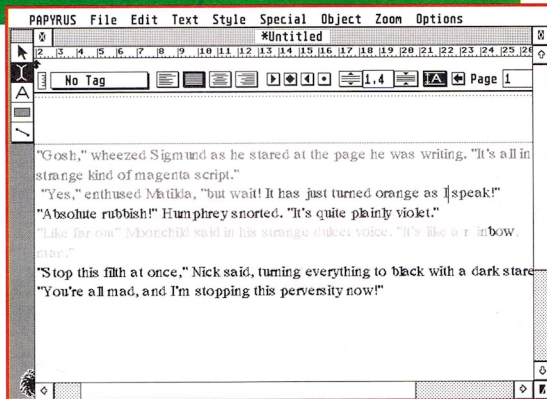
The standard monochrome graphical formats are also supported – GEM, IMG and Degas P13 among

Calligrapher Gold. As far as black-and-white documents go it competes more than reasonably with the likes of *Calamus S* and similar desktop publishers (which are more expensive), while offering extra features like table-creation options. If it's lacking in any

area, it's in its role as a colour document processor. While it can handle text in four colours on both the Falcon and ST (although the ST only has a monochrome display), it currently fails to support any colour graphic for-

mat such as GIF, TIFF or even *Degas* low and medium-resolution pictures. But this is a minor gripe – programs supporting colour cost a lot more.

As a black-and-white document processor *Papyrus* is second to none. Although there is no on-line help function (as in *Calligrapher Gold*), the manual is comprehensive, and saves you precious time when scrabbling around for how to complement your



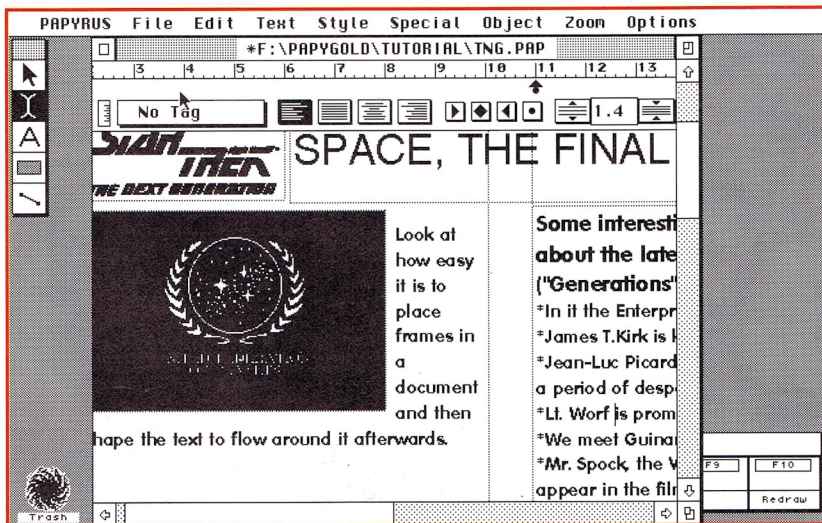
■ Papyrus on the Falcon. Nice splash of colour that. Strange words though.

flowery prose with a suitable font. *Papyrus* takes the best features from *Calligrapher* – the Mac-like control over text editing and the table creation function – and adds loads of its own, like the useful Object Attributes box. *Calligrapher* suffered from a serious lack of speed but, despite the

extra features in *Papyrus*, the program still runs quickly. The ability to use SpeedoGDOS fonts also ensures *Papyrus*' longevity.

What more can be said? If you own *Timeworks 2*, *Calligrapher* or *Wordfair 2*, the upgrade offer is just too good to miss – you won't believe how you survived before getting hold of *Papyrus Gold*. A stonkingly good program. **stf**

NICK PEERS



■ In the obligatory *Star Trek* shot, you see how text can be flowed around pictures in a style as smooth as the *Enterprise-D* navigating a deadly asteroid belt. Oh dear, all those interesting plot spoilers failed to fit on the screen.

Papyrus Gold v3.52

Hisoft = 0525 718181
£129.95 (£89.95 when upgrading from *Calligrapher*, *Timeworks 2* or *Wordfair 2*). ST, 2MBytes, mono display, double floppy drive

Highs

- Excellent range of fonts
- Supports SpeedoGDOS
- User-friendly
- Faster than *Calligrapher*
- Loads of features

Lows

- Requires SpeedoGDOS to achieve its full potential
- No support for colour graphic formats (yet)

What else?

- With the demise of *Calligrapher Gold*, *Papyrus* has the market to itself.

91%

GEMULATOR

You don't have to have an ST to have an ST. This amazing little board turns your PC into a fully working ST.

Your ST has been capable of doing a good job of emulating a PC for some time and now the boot is on the other foot. The Gemulator is a clever bit of kit from the States that emulates an ST on a PC – a neat trick. Even if you have to use a PC, you can still have an ST at a fraction of the cost of the real thing, and you get access to a mass of cheap and tasty ST software.

But (there's always a but) the PC specification you need is high: at least a 386 with 4MBytes of RAM. To make the most of the Gemulator you really need a fast 486 and 8MBytes of RAM. The hardware itself is a remarkably compact board with space for eight TOS chips, and installation simply involves slotting the board into a free expansion slot on the PC and installing the software. There is a series of DIP switches to set the PC's hardware interrupt if the default setting isn't compatible, which is fiddly but at least you only have to do it once. The Gemulator can handle more than one set of TOS chips – for example, you can install TOS 2.06 and 1.62 and pick which one to boot from. Once you've made your choice, the software loads TOS into memory and the PC's screen suddenly, slightly unnervingly, boasts the Atari logo and you are in action.

As well as supporting the three standard ST resolutions you can use higher resolutions – up to 800x600 pixels in 16 colours if the PC has a SVGA graphics card. The amount of memory your new 'virtual' ST has

■ Your ST's Desktop in low resolution like you've never seen it before – a massive 800x600 pixels in size. The Gemulator enables you to emulate extra large ST screens.

depends on your PC: a 4MByte PC can manage a 1MByte ST, an 8MByte PC can manage a 4MByte ST and a PC with 12MBytes or more can emulate a normally impossible 8MByte ST.

The PC's floppy disk drive is used to read your ST disks in the normal way, and it can also read high-density disks if you have TOS 2.06 fitted – a nice bonus. Modems and printers are also fully supported. Hard drives are handled rather cleverly by using virtual drives – files on the PC's hard drive that emulate ST hard drive partitions. These grow in size as required, up to 30MBytes, and when running Gemulator they act exactly the same as normal ST hard drive partitions. If you set up a PC partition of less than 32MBytes on the PC you can assign this to be used as an ST partition and then transfer data directly between the two systems.

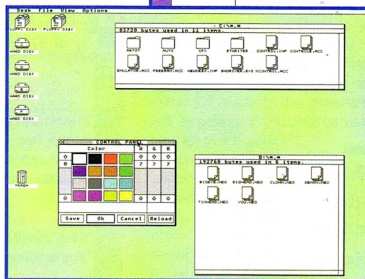
To get you going there are a few ST programs already installed on the PC's virtual ST drive – the control panels and a couple of shareware applications.

Does it work?

Software compatibility is fairly good, and most well-behaved applications run



■ Two ST low-resolution Neochrome pictures loaded in True Paint. The large screens are handy but can be horribly slow to redraw. Unless you really need them you're better off in more reasonable sizes.



without hassle, including: *Calamus*, *GFA Basic*, *1st Word*, *Pagestream*, *MultiTOS*, *Neodesk* and *Word Flow*. Any program that uses timers, like *Spectrum 512*, won't like it, and neither will anything trying to use ports that aren't there – MIDI ports for example. Don't expect any but the most legally programmed games to run.

There were some problems with disks during testing – the Gemulator sometimes took a while to recognise a changed floppy disk, and it had problems reading some strangely formatted ST disks. Otherwise the PC behaves exactly as an ST would, with the familiar Desktop and folders full of ST software.

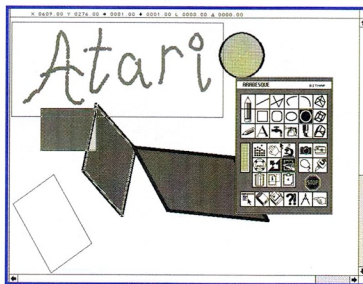
The need for speed

The main problem with using the Gemulator is speed. It takes a very fast PC to match the speed of an ordinary ST. It claims to be able to match an 8MHz ST using a 25MHz 486 PC, but even a 50MHz 486 can seem sluggish in comparison to the real thing. The screen redraw is slow, especially if you opt for the extra-large screens, although a fast VGA card helps. Stick to standard ST screen sizes and you should avoid most problems. To get a real speed advantage you are going to be looking at a very fast 486 or a

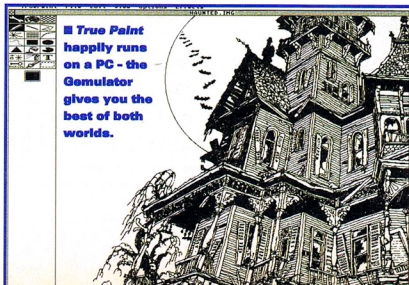
Pentium PC – we're talking megabucks here, just to emulate an ST (which is much less expensive than a PC in the first place).

So who needs to use a PC to emulate an ST? If you already have an ST with a hard drive then you may as well stick with that and spend the money on a faster processor, extra memory or a high-density drive kit instead, and you'll have a hot ST with no compatibility problems. If you already have a powerful PC and a fairly basic ST system then the Gemulator's not a bad option – it's much cheaper than buying a hard drive, for example. It's a good way to get a powerful ST system for a fraction of the cost, just as long as your PC is fairly nippy, and you don't need things like the cartridge and MIDI ports. The emulation is an amazing trick and it's a welcome surprise to see a proper desktop environment on a PC at last. **stf**

CHRIS LLOYD



■ Software compatibility is good, especially for GEM programs. Here is *Arabesque Pro* running in high resolution. You can switch between colour and monochrome in a couple of keypresses.



■ True Paint happily runs on a PC – the Gemulator gives you the best of both worlds.

Gemulator

£139 without TOS
£169 with TOS 2.06
FaST Club ☎ 0602 455250
386 PC, 4MBytes of RAM

Highs

- Runs most serious ST software on a PC
- Uses large screens and high-density drives

Lows

- Veeerrrrrry slow
- Compatibility problems
- No cartridge or MIDI ports

What else?

- Janus – another hardware based ST emulator from CGS Computebild. See News on page 10.

76%

Warehouse Clearance!

ATARI ST/STE DISK SOFTWARE

PERSONAL FINANCE MANAGER	£19.99
RAYTRACE	£19.99
HOME ACCOUNTS 2	£19.99
STOS THE GAMES CREATOR.....	£9.99
STOS COMPILER	£9.99
STOS 3D	£9.99
STOS SPRITES 600	£9.99
STOS MAESTRO	£9.99
HOTWIRE	£9.99
THAT'S FUN FACE	£8.99
VIRUS KILLER	£3.00
TIME	£6.99
HEREWITH THE CLUES	£6.99
PREMIER COLLECTION	£9.99
GAMES GALORE	£6.00
ARCHIPELAGOS	£7.00
PROTEXT V.4	£24.99
STORMABALL	£9.99
MAXIFILE	£9.99
STF BASIC 3	£14.99
RESOLUTION 101	£6.99
GAZZA 2	£7.99
WATERLOO	£9.99
INTERPHASE	£9.99

PRICES INCLUDE VAT, POSTAGE AND PACKING
ASK TO BE INCLUDED ON OUR
REGULAR MAILING LIST

WE ALSO STOCK ITEMS FOR THE SPECTRUM, COMMODORE 64,
AMSTRAD 464/6128 AND 464+/6128+ TOGETHER WITH AMIGA
AND PC'S AND OF COURSE ATARI ST/STE'S!

All orders sent by return: Cheques/Visa/Access/PO's

TRADING POST

VICTORIA ROAD, SHIFNAL, SHROPSHIRE TF11 8AF

TELEPHONE/FAX (0952) 462135

13 QUALITY GAMES

Circuitry
Circuitry 3 'The Mars Base'
Darts
Bright Spark
Building Trouble
Building Trouble 2 'Night Shift'
Aaron
Card Bash
Card Bash 2
Super Snakes n Ladders 1.0 meg
Threes n Fives
Aaron Editor Ver 2.0

PLUS

Dominoes 0.5 meg
Dominoes 1.0 meg

13 Games and 1 Editor, including the
popular Dominoes. All for only 20
pounds sterling. This one-off price
includes all registrations.

Please make cheques/postal orders
payable to Andy Morgan

A BARGAIN
AT
£20

DOMINOES

"...our opinion, a big thumbs
up..." ST Handbook - Issue 2
"...give it a go and you'll be
pleasantly surprised..."
ST Review - Issue 21

GALAXY BUNDLE PACKAGE
NEBULA ENTERTAINMENT
382 KINGSWOOD ROAD
NUNEATON
WARWICKSHIRE
CV10 8QP

COPYRIGHT

All programs in this package are copyright NEBULA ENTERTAINMENT.
Any form of copying, alteration, hiring or lending is totally illegal.



2 DISKS PACKED FULL OF TOP
QUALITY GAMES FOR YOUR ST



POWER COMPUTING
LIMITED

44a/b Stanley Street Bedford MK41 7RW
Tel 0234 273000 Fax 0234 352207



POWER DRIVES

PC720B, the award winning
external disk drive which includes a
virus blocker, built-in Blitz Turbo
and is able to boot from drive B.

PC720B	£60
PC720P (inc. PSU)	£55
PC720I (internal)	£40
(360K upgrade drive, needs case modification)	
PC720 OI (official)	£45
(720K internal replacement drive)	

DRIVE B CABLE

If you have an internal drive that is
not compatible with 'boot from
drive B', this cable will solve your
problem.

Drive-B cable	£9.95
---------------------	-------

BLITZ TURBO

Back-up disks at lightning speeds,
Blitz copies from the internal to the
external drive and cleverly by-passes
your ST's controller chip. In
around 40 seconds you can back-up
an ST disk, what's more you can
switch between your disk drive and
Blitz Turbo without disconnecting
your Blitz interface. (1988
Copyright act applies)

Blitz Turbo	£25
-------------------	-----



POWER SCANNER

The award winning scanner from
Power Computing allows you to
scan up to 400DPI in real-time
greyscale, with autoscanner rate detect.
The scanning software included
allows you to edit and manipulate
any image you scan.

Power Scanner	£99
Power Scanner inc OCR	£149

RING INTERRUPTION

Use with Ultimate Ripper or
SuperMon. Stop games or programs
in their tracks, search for infinite
lives and hack with code. A press of
the key and the program is restarted.

Ring Interruption	£15
-------------------------	-----

MEMORY

1MB Simm	£35
----------------	-----



POWER OPTICAL

128MB Optical Ext.	£779
128MB Optical Disk	£35

EXT. HARD DRIVES

Slimline 3.5" SCSI, complete
with interface, software &
cables.

52QMB	£179
(Special offer, last few remaining)	
260MB	£349
540MB (TT/Falcon)	£499
540MB (ST/FM-e)	£549
1GB (TT/Falcon)	£799
1GB (ST/FM-e)	£849

RAM BOARDS

0.5MB	£49.95
2MB	£79.95
4MB	£129.95

SUPERMON

SuperMon comes with all the
features of the 'Ultimate Ripper'
and more. Some of the features
included with SuperMon are:
Program switcher - allows to programs
to be in the memory simultaneously
and switched between at the touch
of a key, Printer spooler - allows files
to be printed at the same time as
other tasks, Comprehensive
debugger - disassemble programs
and step through them, intercept
OS calls, search memory or find
where a routine is called from
automatically, Diagnostics
function - check the internal
functioning of your ST disk
analyser, custom format disks,
read/write sectors, hide files,
Utilities - the SuperMon also has
many utility functions available,
including reset proof RAM disk,
mouse trap function, time display,
screen snapshot and 50/60Hz toggle.

Ultimate Ripper	£25
Including SuperMon	£35

MISCELLANEOUS

Atari Mouse	£15
Power Clock	£17.99
Optical Mouse	£29.95
Replacement optical mat	£10
100 Branded disks + box	£49
10 Branded disks	£5
Intruder 1 joystick	£29.99
Maverick 1 joystick	£15.99
Apache 1 joystick	£7.99

delivery: next day £5.00 2-3 days £2.50 Saturday £10.00
deliveries are subject to stock availability, all prices include VAT, E & OE

PUBLIC SECTOR

Nick Peers and Simon Forrester take their monthly vacation in public domain land, where a huge amount of software is copied with no guilt, remorse or charge whatsoever.

UTILITIES

THE MARCEL WORD PROCESSOR

MARCEL SOFTWARE

Internet: marcelca@world.std.com

SHAREWARE: £10

With three full-price word processors reviewed this month, it seemed only logical to present the shareware alternative as a fist of defiance from the revolutionary PD army of the Atari scene. Overthrow the capitalist software industry by using your PD word processor with pride, spreading the

processor files, enabling you to port documents from one application to another without losing italics, indents or any other text styles you use. This is a standard supported by many Macintosh and PC packages, which is why Marcel is pushing this feature so heavily.

As far as word processors go, there's a standard that has to be reached; a cut-off point below which police tape should be laced across the disk drive. *Marcel* soars above all danger with ease, being laden with a host of different word processing features dealing with style, size, layout, pagination, and many other additional features. If it's not here, you don't need it. Excellent use of the mouse makes block operations a lot simpler than other PD WPs, no longer requiring hesitant keypresses and hazy

memories of instruction files. As you'd expect, there are keyboard short cuts for Cut, Copy and Paste.

Then, of course, there are printers. The normal situation, where you need drivers to drive drivers, just to discover the damned thing's printing in Chinese is no longer necessary, because the package comes with complete support for all major standards of printers, from Epson through to HP Deskjet. This comprehensive range of application-specific drivers (unusual for PD) enables *Marcel* to compete with commercial programs in terms of flexibility.

This is where the package would normally stop, and we'd all feel warm and glowy about the world of PD and shareware. This one doesn't, however. As well as straightforward text handling, *Marcel* features modest layout facilities for including page numbers, headers and footnotes, as well as automatic updating of times and dates.

The reference linking facility enables you to note specific chunks of

text and refer to them at any stage, making *Marcel* invaluable for planning and research as well as straight text-crunching. There are also macros - mini-programs that you create yourself to carry out repetitive tasks at the touch of a button - which save keypresses and attention spans.

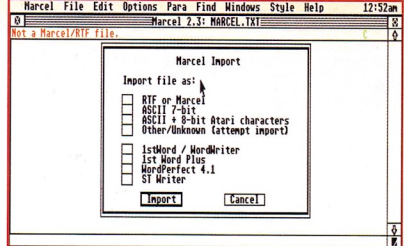
The real test of a word processor is an operation like searching. *Marcel*'s Find menu boasts a powerful Search routine with optional Replace, as well as options to search for the next or previous blank line (cunning). The menu also contains quick options for the start and end of the document (thank you, programmers).

When you've finally finished creating, it's time to spell-check, a function that *Marcel* performs admirably with the aid of a hard drive. Take the hard drive away though, and you'll need a copy of *Chambers* by your side, but you can't expect miracles on 1MByte, can you? When you do get the spell-checker up and running, you realise that all spell-checkers everywhere are a pig to use, and *Marcel* isn't an exception.

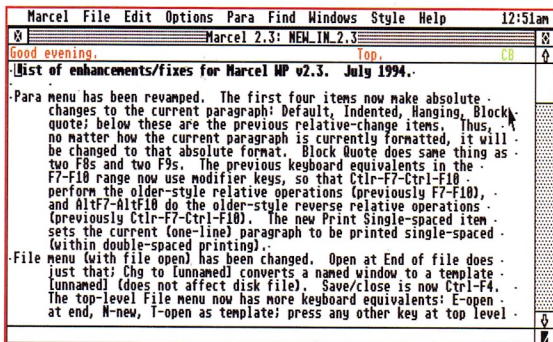
Marcel is a fun package to use. It doesn't boast such powerful features as some of the commercial packages around to date, but it comes damned close, meeting every criteria you'd set for a word processor. If you want to shell out big money on some flashy package with a ring-bound manual in a big box, go ahead, but the rest of us have found something worth sticking with.

STF RATING: 85%

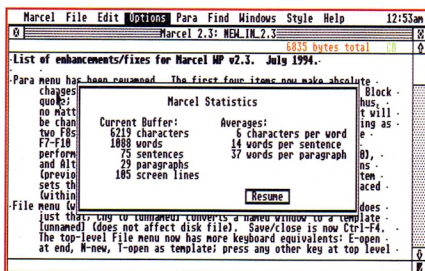
Still stupidly powerful for a PD word processor, as you can see.



■ As well as the versatile RTF, *Marcel* can import files almost from any other package you care to mention.



■ As you can see, *Marcel* supports extra text styles such as bold and italic.

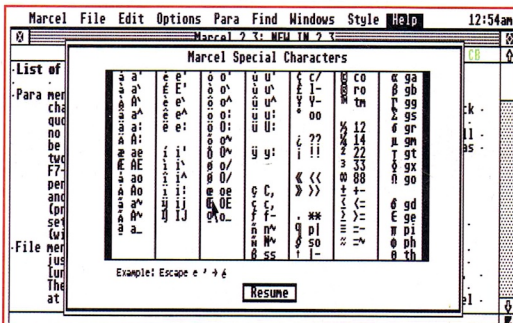


■ Yup - *Marcel*'s powerful, all right.

seeds of communism, free will and peace, and rid the world of oppression and slavery... Ahem, sorry about that. Back to the *Marcel* review.

Installation is simple, the package happily decrunching anywhere and running with any version of TOS. A hard drive comes in handy at this stage, though it's not essential to run *Marcel*, (if you don't mind spell-checks that take a fortnight).

The first feature *Marcel* boasts is its full use of RTF, a standard for word



PUBLIC DOMAIN	
Archivers	£1.50
Antimony Programs 1, 2 or 3, each	£1.50
Antimony Programs (HiRes)	£1.50
First Falcon Utils Disk	£2.00
asyxtest	£1.50
Id3 Sequencers	£1.50
peccy Emulators	£1.50
Procrs	£1.50
Virus Killers	£1.50
Databases	£1.50
Databases Collection for 2	each £1.50
1, 2	£1.50
Holotracker 1.5	£1.50
Games Pack, Asteroids, Astrapanc, Atax, Buzzzone, Bellum, Blaster	£1.50
Games Pack, Alien Blockade, Metamorphic	£1.50
Games Pack, Breakout, Breakout II	£1.50
Games Pack, Blox, Centipede, Cloud	£1.50

Angry Demos	£1.50
Games Pack, Grav, 2 Maz	£1.50
Games Pack, Llamator 1/2	1lb
Review, Revenge of the Mutant Camels	£1.50
Games Pack, Cybernetic, Daleks	£1.50
Games Pack, Worm etc.	£1.50
Games Pack, Tetris, Downfall, Kubese etc.	£1.50
Games Pack, Capture of Cthulhu, Grachen	£1.50
Combat	£1.50

MP3 CATALOGUE

SOFTWARE

BUSINESS

Home Accounts 2	£37.99
S-Spread 3	£45.99
S-Spread 4	£74.99
C-DW	£29.99
Graph 3	£39.99
LD Power 1 Spreadsheet	£24.99
Superbase Pro	£74.99

MUSIC/SOUND

Concerto	£29.99
Clarity (Falcon only)	£89.99
Cubase Lite 1, is track, score printing capability	£249.99
Cubase Lite 3, midi-in/out, score printing capability	£279.99
Cubase Audio Falcon	£729.99
Integrated digital audio midi with score printing capability	
Musicon By Compo	£99.99
Play 16 Digitiser	£29.99
Stemco Master	£29.99

UTILITIES/PROGRAMMING

DIAMOND BACK 3, backup utility	£1.99
ST Straight Fax 2.1	£85.99
ST Basic	£5.99

VIDEO AND GRAPHICS

FlexiD 1	£38.99
----------	--------

Video Paint.....	£33.99
Video Master.....	£49.99
Video Master (falcon only).....	£74.99
Video Master RGB.....	£109.99
WORD PROCESSING & DTP	
Protext 4.3.....	£39.99
Pagestream 2.1 UK Spec.....	£169.99
That's Write V.2.....	£109.99
TIMEWORLD/SIST WORD PLUS SPECIAL OFFER!!!	
This excellent bundle comes with TimeWorls 2.1 and First Word Plus 3.2 only £84.99 or First Word Plus 3.2 only £45.99 and TimeWorls 2.1 only £39.99	
ATARI REPAIRS	
We offer a FREE quotation on your Atari or any peripheral (monitors, printers etc). A delivery tariff of just £5.00 is charged for return delivery or alternatively you can visit our showroom. We can also arrange a courier pickup at an additional cost of £1.00.	
	
All work is carried out by our highly qualified engineers in custom built premises. We will also install any upgrade/ software or accessory from our main advert free of charge unless otherwise stated.	
All repairs are covered by a 90 day warranty.	
Tel. 0532 319444	

GAMES

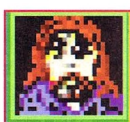
WALLS OF ILLUSION GOODMAN INTERNATIONAL GA 2256

Walls of Illusion has been reviewed before in *STF* (issue 54 - see page 83 if you missed it), and received 85%, particularly creditable considering the fact that the game was completely in German. Now that an English version has been released as PD, an update seems only fair.

There doesn't seem to be a plot behind *Walls of Illusion*, although the original review mentioned something about escape and eating the odd apple (your granny would be happy to know that). No doubt there's also an evil wizard whose name is as unpronounceable in English as it was

in German but hey! Who cares anyway?

One of the most impressive things about *Walls of Illusion* is its graphics, which give similar commercial offerings a run for their money. Perhaps even more impressive is its playability, which surpassed the language barrier first time it was released. That said, the fact that the clues left within the game can now be quickly deciphered without recourse to a German dictionary certainly adds to the game. If you're a long-time fan of the genre



■ "Oi! Get off moi land," the skeleton said in a strong West Country accent, taking Harry and company completely by surprise. "Or you'll see a scythe of me you won't like." (I've read some dreadful gags in my time, but that was truly poor - Jill)

you'll lap this up, but if you're new to these 3D RPG *Dungeon Master*-type games, you won't be disappointed,

and at the price of a blank disk, who's complaining anyway?

STF RATING: 85%

WORLD SERIES CRICKET

RIVERDENE PDL

World Series Cricket is (allegedly) the final version of *International Cricket*, released a couple of years ago. One or two players can compete in any

number of tournaments, ranging from ten-over games through to complete tours consisting of a test match series combined with one-day fixtures. Loads of options have been added over the years since the game first saw the light of day - now you

■ You can rename the England team and call them something more appropriate to their skill and prowess (or lack of it). But why can't you class their batting abilities 'joke'?

	BATTING	BOWLING
Token batsman	Good	n/a
Rubbish	Good	W'keeper
Also Rubbish	Excellent	n/a
Still Rubbish	Excellent	Medium
Awful	Good	n/a
No Better	Good	n/a
Bright Prospect	Competent	Med./Fast
Ex Prospect	Competent	Med./Fast
Ex Prospect	Competent	Med./Fast
Inaccurate	Tail	Spin
Short of a length	Tail	Med./Fast
Made of the crease	Good	Spin
Hopeless	Good	n/a
Even worse	Competent	W'keeper
Ageing "star"	Competent	Med./Fast
Captain's best	Med./Fast	Med./Fast
Avgs. 22.6	Good	n/a
Sickeningly Bad	Competent	Medium
Nauseous	Tail	Spin
L.F. Bothan	Tail	Fast

LOAD	England	SAVE
ORIGINAL NAMES	EXIT	CURRENT NAMES

have to deal with weather conditions and different pitches, which alter the swing and spin of the ball, and have an effect on the bowlers you must pick. There's even a third umpire involved in those borderline run-out cases.

The game suffers in that many of the other additions appear little more than cosmetic, although if you're a stickler for detail they're a welcome addition to the game. One example is that although you can nominally select different pitches to play on, the actual playing screen

seems the same wherever you decide to play, be it Old Trafford or somewhere in Sri Lanka.

World Series Cricket has always been an enjoyable game, and the updates over the years have added polish, if not developed the gameplay much. Recommended for depressing evenings (usually days two to five of the latest test match) when you think you can do better than the England team, only to find you can't. And that's saying something.

STF RATING: 75%



■ You certainly can't fault the game's authenticity. Here you see England in the midst of yet another collapse.

THE ST FORMAT PD DIRECTORY

16/32 PDL, 173 High Street, Strood, Kent ME2 4TW = 0634 710788
A-ONLINE ATARI CEC, 1229 East Mohawk Avenue, Tampa, FL 33604, USA = 010 813 237 1656
AQUILA, 190a Mackenzie Road, Beckham, Kent BR3 4SF = 081 778 00844
ATARI USER GROUP(SCOTLAND), 9/3 North Hillhousefield, Edinburgh EH6 4HU = 031 553 1288
AWF PDL, 123 Hazelwell Crescent, Sturcheley, Birmingham B30 2QE = 021 458 4345
BALSALL PDL, 6 Rushton Close, Balsall Common, Coventry CV6 7PA
BLYTHE PDL, Copes Farm, Withington,

Leigh, Stoke on Trent, Staffs ST10 4PU
CHAOS PD = 0296 89059
CALEDONIA PDL, 250 Oldtown Road, Hilton, Inverness IV2 4PT = 0463 225736
DIGITAL DISK, Steve Hill, 85 Ceres Road, Plumstead, London SE18 1HL
EMERALD CITY, PO Box 28, Southants SO9 7HS = 0703 672577
FALCON OWNERS GROUP, 10 Oak Drive, Portishead, Bristol, Avon BS20 8QS = 0275 843241
FaST CLUB, 2 Broadway, Nottingham NG11 1PS = 0602 410 241
FERDY BLASET, Halleyweg 114,3318 CP Dordrecht, The Netherlands = 010 3178 172 879

FLOPPYSHOP, PO Box 273, Aberdeen AB9 8J = 0224 312756
GL-PD 62 Colwyn Ave, Winch Wen, Swansea SA1 7EJ = 0792 799762
GOODMAN PDL, 16 Conrad Close, Meir Hay Estate, Longton, Stoke on Trent, Staffs ST3 1SW = 0782 335650
LAPD, PO Box 2, Heanor, Derbyshire DE75 7YP = 0773 761944
MAGNETIC FIELDS, PO Box 118, Preston, Lancs PR2 2AW = 0772 881190
MERLIN PD, 11Grange Close, Minchinhampton, Stroud, Glos GL6 9DF = 0453 882793
PD4U, 4 Sintonville Avenue, Belfast, BT5 SDG = 0232 672338

RIVERDENE PDL, 30a School Road, Tilehurst, Reading, Berkshire RG3 5AN = 0734 452416
SDPP c/o Stephen Day, 11 Allington Mead, Bridport, Dorset DT6 5HF = 0308 427179

BUYER BEWARE

Any library included here does not imply that *ST FORMAT* endorses or recommends any of them in any way. If you run a library not listed here and wish to be included, or if you want to amend anything, send details and your latest catalogue to: PD Library Directory, *ST FORMAT*, 30 Monmouth Street, Bath, Avon BA1 2BW.

MUSIC

MIDI UTILITIES

FLOPPYSHOP MID 4580

Five general utilities for use with MIDI setups. *Delay Calculator* is a shareware program which, allegedly, works within any MIDI program and enables you to control the delay function on your setup.

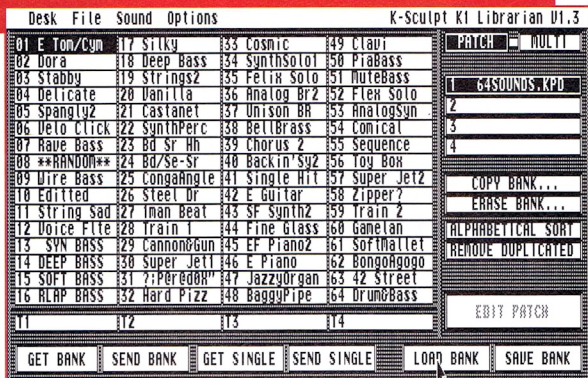
Of the others, *K-Script* is a librarian for Kawai K1 series synths. Your ST acts as a permanent receptacle for various sounds and banks of sounds, which can be transferred to and from the synth when required. There's an Accessory version for transferring sound banks to the synth from within any GEM-based program, and also a sample bank of 64 sounds on disk for you to try. There's also a demo of an accessory called *MIDI Spy 1.2* which

simply enables the recording and playback of MIDI from within a multitasking environment.

Picture Music, meanwhile, is rather more bizarre – claiming to convert low-resolution *Degas* and *Neochrome* pictures into MIDI music data (but why?). Finally, *Psycho-MIDI* consists of two programs that work along similar lines to *Picture Music*, but in reverse – you play your synth and different low-res colours appear on screen.

This is a mixed suite of MIDI utilities, ranging from useful to useless-but-fun. But it's well worth the price of a blank disc, especially if you own a Kawai synth.

STF RATING: 75%



■ Why do all synths possess sounds like 'zipper', 'comical' and 'train 1'? Aren't 'similar-sounding synth 1' and 'indistinguishable synth 2' sufficient?

EDUCATIONAL

EDUCATIONAL COMPILATION

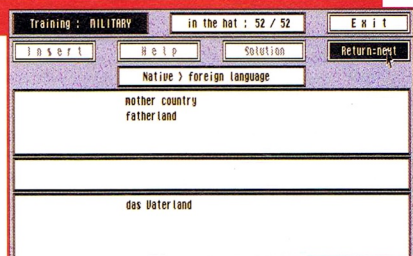
FLOPPYSHOP EDU 4585C

Four programs make up this rather hit-and-miss disk. The best program by far is *Interpreter* for English-French or German-French translations. The English-French dictionary contains 1,720 words, and the German-French one has 739, with the easy option of entering more as and when required.

Meanwhile *Voktrain* aims to aid vocabulary learning along broadly similar lines, but using a series of 'lessons', the contents of which can be edited as wished. The English version asks for translations of some unexpected topics like the Third World, the military and even drugs (mixing such phrases as 'out-patients' with references to prostitution and cannabis). Definitely not recom-

mended for your kids' use.

Cloze-In, on the other hand, is a text editing and writing program in which your child fills in the missing words correctly, with clues to help him or her decide what it is. And finally, *Romans* consists simply of a number of incredibly poorly-drawn and uninformative maps displayed with a *Tiny Viewer* program, but not even in the correct chronological order. The latest picture dates inexplicably to 44BC and the program as a whole contains nothing that can't already be found in a textbook. About the only positive thing to be



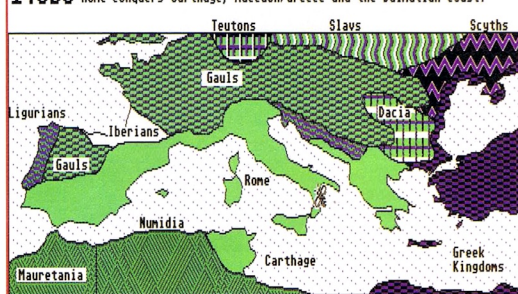
■ If you want to learn the German for words connected with obscure topics like the military, the law or even drugs, you need *Voktrain*. However, you won't find the German equivalent of "Hello, my name is Joe Bloggs," anywhere at all, never mind "Can you direct me to the nearest station, please."

said here is the inclusion of *PicSwitch* 0.7, ostensibly for converting the pictures to a different format, but which you could utilise far better elsewhere.

The package would have scored a respectable 60% on the basis of *Interpreter*, but the inclusion of *Voktrain* is a serious and potentially damaging mistake in what is, after all, an educational program.

STF RATING: 45%

1458C Rome conquers Carthage, Macedonia/Greece and the Dalmatian coast.



■ Guess what's happening here? Apparently this is the Romans' rise to power. Stunningly interesting, huh?

BART'S RAINY DAY

FLOPPYSHOP ART 4583C

What a pity. *Bart's Rainy Day Colouring Book* looked like it had the potential to be quite good – prepare templates with the accompanying program using a basic array of shapes, then keep your bored child occupied for hours colouring them in. The Save option enables him or her to leave partially

finished pictures for later, and overall the program sounds complete.

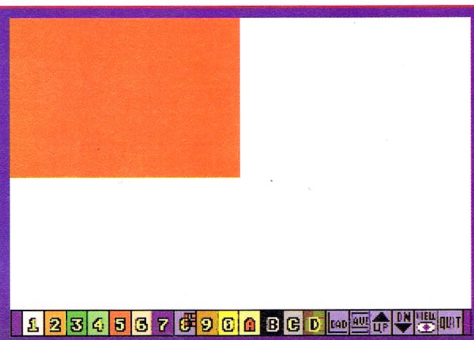
In truth, however, *Rainy Day* fails horribly to live up to expecta-

tions. There is no on-line Help option, and the instructions are easily missed by an impatient child pressing keys during the introduction. The user-interface is not the most friendly, and a lack of example files makes it impossible

to test the program itself before delving into it. Indeed, the program appears suspiciously buggy. The template drawing program doesn't seem to work properly, and without a working template, how can you be expected to use the main program? This program should carry a health warning: don't touch it. **stf**

STF RATING: 15%

■ Looks simple doesn't it. But no. Learn to program in 68000 instead – it's much easier.



Viruses

Always check your disks for viruses. We'd recommend UVK v6 (Ultimate Virus Killer), which you can get in our Reader Offers (on page 89) for £9.95. You know how much time and effort you could be saving yourself.

INDIES

CORNER

Shoegazing, baggy jumpers, and silly shades – trademarks of the Indie movement. The ST hangs out with them.

SPRITEFX

Occasionally, the flurry of word processors breaks and the roar of lasers stops, and someone actually decides to do something for him/herself. A few people read features such as the excellent language feature in this month's issue (on page 14), and decide to get down to writing their own games.

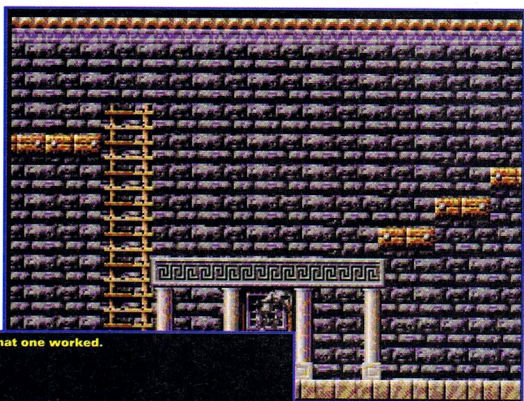
Unless you believe in the benefits of construction kits (also covered in this ish, surprise surprise, on page 80), you'll find yourself sitting down with a language and starting from scratch. If your game involves moving objects or animation of any kind, you're going to come unstuck – the ST has sprites but they're not exactly easy to use, and getting one sliding smoothly about the shop requires blood, sweat and tears. This is where *SpriteFX* comes into play, hopefully saving you a job or two.

The package started out in the public domain as a simple utility for defining movement paths of objects, which could then be pasted into your own programs or assembly listings with minimal hassle. Time moves on however, and software advances. It would seem that *SpriteFX* has advanced far enough to justify a price tag, so let's take a look at exactly what it can do.

Once the demos have been dispensed with, you're left staring at the package's main screen, containing only a grid, status bar and colourful pointer. It turns out that this is in fact a complex and fathomless interface, full of keypresses sadly hidden deep within the manual. The mouse is used to actually define the sprite path, indicated by a line of yellow dots. As you speed up the mouse movement, the spacing between the dots increases, making your final sprite move at a greater speed. This speed sensitivity is vital for complex attack patterns that add depth to gameplay – an alien that speeds on screen, stops, slowly creeps around, then pounces on you is more fun to kill.

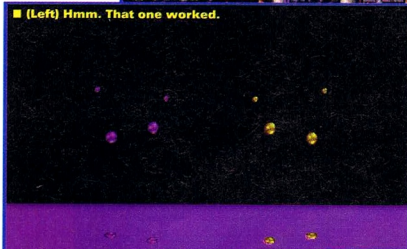
Play all you like

Defining sprite paths is a useful action, but essentially it's a quick routine anyone could knock up. Where *SpriteFX* tries to excel is in its versatility and extra features, enabling you to load in a different background image to plot and test on, and to cut sprites



■ (Left) Hmm. That one worked.

■ (Above) *SpriteFX* enables you to do clever things with sprites and backgrounds, as shown in the impressive demos. This one features animation, movement and transparency.

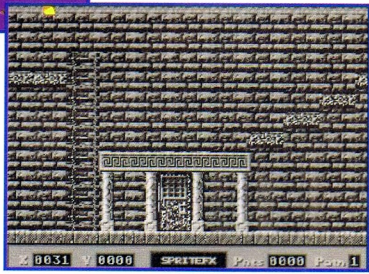


■ The trick is to define a path on the backdrop using *SpriteFX*'s facilities.

from the image and build up sprite and animation sequences for use in your own work.

Using *SpriteFX*, you can't help feeling that there have to be easier ways of defining and editing sprite paths. Drawing a smooth curve with a mouse is next to impossible, as is plotting a straight line. Unfortunately, things like curves have been ignored – you're stuck with straight lines and jagged corners. The package's lack of on-screen assistance can be alienating at first, and while the manual (a text-file) is organised with new users in mind, unfortunately, it hasn't been written with anyone in mind, flatly refusing to lend any assistance to the newcomer.

It would be wrong to criticise a technical package for being too technical, though – *SpriteFX* is an invaluable utility for all you budding sprite path definers, covering every task you'd need. This isn't a beginners package, and can't be



expected to deal with beginners. Instead, *SpriteFX* caters for people in glasses who know their stuff, and it does it damned well, too. The rest of you can just have fun defining and animating silly sprites. **stf**

SIMON FORRESTER

SpriteFX

£5 Paul Passman, 82 Lower Salthill, Galway, Ireland

Highs

- Excellent features for all sprite operations
- Comprehensive documentation

Lows

- Damned difficult to get to grips with
- Not for the faint-hearted

70%

Support

This is a technical package, but it comes complete with reams of source code, demonstration files and even ASCII tables containing information for use in your own work. Though you'll be left to your own devices when using the package, the support given for exporting information and sprites is second to none, making this the ultimate package to use if you want to get things moving on screen.



■ Jeff was a builder. In his spare time, he was 'odd mythical cyborg man'.

PROFESSIONAL FOOTBALL MASTERS 4

VERSION

Quite simply the best Football management game for your computer.

We have served thousands of satisfied customers during our 4 years of trading. Over 10,000 man hours (during 5 years) has been dedicated to the production of this constantly improving game. It is one of the most realistic and accurate representations of a professional football managers annual challenge to tactically outwit and conquer every opponent.

Managers : 1 to 4 Human players, Ratings, Performance statistics, sack and offers. 3 Difficulty levels, Manager of the month and season awarded, Pools, Pick any team in any division to begin with.

League & Cup : Premier 22 teams, Division 1, 2 & 3 have 24 teams, Playoffs, Tables. 7 Cup competitions with precise rules (2 legs, extra time, away goal rule, seeded draws, European Cup tables, 5 subs, non-domestic player restrictions etc.). Finalist route to glory.

Games : Yearly fixture/previous list, Week fixtures/results, Results from previous meeting with opponent (goes back up to 6 seasons).

Players : Real life statistics reflecting the start of 93/94 season with real positions, height, age. Live transfer market, Contract & wage negotiations, Preferred foot (left/right/both), Loans, Injuries, Training, Special talents, Trainees, Goalkeepers (separate skill categories), Defenders, Midfielders, Attackers & Utility Retirements, Foreign transfers, Unhappy players, Top 10 Hot shots.

Team : Training, Tactics (15 different styles), Aggression, Formation allows specific player field settings (Left winger, Sweeper etc.).

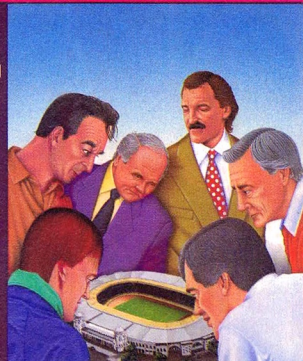
Club : Sponsorship, Ground improvements, View opponent, Finances The Match: Real time scoreboard reporting goals & injuries yellow/red cards, Sound effects, Interventions permitted at any time to change tactics, formations and make subs. Physical graphical penalty participation (optional). Over 80 different referees.

Other : Fast load/save, Printer access, 20 Options to set various game preferences, Instruction book, Easy to play, Technical support.

Plus : Over 100 other meticulous refinements impossible to list here.

Editor : Allows you to amend various items in saved games. \$12 Extra

Scottish : Dedicated version full details upon request.

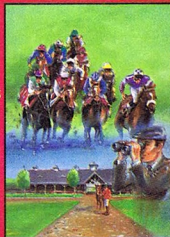


STABLE MASTERS VERSION 2

This game has been designed to be as close to real racing as possible. Five years of development by a clever racing expert has led to the second revision of this Flat Horse Racing Simulation.

Up to 4 players can participate as Owner Trainers with the primary objective of becoming the top rated trainer, in respect of prize money won, at the end of each racing season (March to November). There are up to 35 other intelligently controlled computer trainers to compete against and compare your personal performance. To achieve this aim you must discover a potential champion and train them so that they become capable of competing well and winning any of the 47 big prize money races (Handicap and Group), eg. The Derby. To give you an idea of the tools provided in this game to assist you reaching your objective we have listed the main features below:-

- 250 horses each with over 60 independent variables.
- 26 different race courses (2 all weather), real life characteristics mirroring the diversity of racecourses in the UK (descriptions provided).
- Formbook and Win Summary Cards cover the previous 200 races.
- Animated race display or just the result. View Declaration List for races.
- 20 Jockeys who vary in ability and booking fees, Orders & Feedback.
- Very informative report by Head stable lad, Tipsters, Bookmakers.
- Racecards similar to racing press. Real life, Handicaps & Race Types.
- Injuries & Vets. Load/Save game. Many other items included.



ORACLE RACING SYSTEM

NEW REVOLUTIONARY HORSE TIPPING SOFTWARE YOU COULD HAVE WON

£46,518

Winning based on a maximum stake of £100.

During the period 01/01/93 to 31/12/93.

ONLY using the main meeting of the day.

245 Recommended Bets, 146 Wins, 62 Placed.

Statistics & details available upon request.

Open National Tipping Competition : Organised by Racecall, Tote regulated, this program achieved first second. This led to a serious approach from a well known national book maker. Rejected in favour of supporting the public.

Betting Formula : This program tells you exactly what to do. You are NOT permitted to amend our system unlike so many other similar programs. How confident can you be in something that invites amendments!

User Friendly : No racing knowledge required, easy to use, full tutorial book plus full time technical support.

Research & Development : 3 years full time race analysis (ongoing) to refine and test the prediction system.

Inside Knowledge : Unique tips from contacts in the know eg. includes a list of horses expected to win next race.

Monthly Updates : Recommended optional extra and if it fails to break even we'll send the next one free of charge.

Program Price : £99.95 Buy now before success forces increase.

Computers : PC Compatible, Atari ST and Amiga.

Latest Press Comment :

CU AMIGA MARCH 1994

"Oracle is, without a doubt, the most impressive one I have ever come across."

"Oracle is stunningly accurate"

"If you're really serious about your gee gees, there's no better package to lay your hands on."

CRICKET MASTERS

This is a purely managerial cricket manager game that concentrates on strategy and includes plenty of relevant statistics. The game has been designed and developed by a true fan of the sport. It replicates everything that a real manager has to contend with and it's a totally unique production that all Cricket fans should experience.

A summary of the main features is shown below:-

- AXA EQUIP & LAW 18 league county teams, 50 overs per game.
- 4 Cup competitions including Benson & Hedges, Nat West.
- 20 different match umpires with accurate names and strictness.
- Accurate player details Surname, height and age.
- 27 different player attributes. Most skills have a direct impact on the effectiveness of each individuals actions during a simulated match.
- Easy player selection. All game text is clearly presented.
- Batting and bowling averages. Top batting and bowling tables.
- 3 Different training intensities to boost batting, bowling or fielding.
- Weather, pitch and light often make an impact on ground condition.
- Full match highlights let you watch the action ball by ball with full graphics and/or realistic sampled sound effects for significant events (Fours, Umpire decisions, etc.). Interventions are permitted at any time to change batting tactics or fielding placings.
- 3 Batting/Bowling classifications.
- 15 different field placings.
- Full scorecard results with best batting and bowling figures.
- Other staff (Physio, Groundkeeper, Scout) can be hired and fired.
- Annual league fixtures listing. Current week and last league results.
- View current cup competition draws and historic records.
- Real time transfer market. Player contract and wage negotiations.
- Sponsors, Finances, Poor ground fines, Manager rating.
- 15 Options to alter game prefs., Load & Save game, Printer access.
- Full instruction book with plenty of examples. Plus Many More.



WORLD CUP CRICKET MASTERS

A fantastic graphical and/or tactical representation of Cricket that has been completely written by a traditional fan. You can physically participate with batting and/or bowling or leave it to the computer to automatically handle. See full feature list below :-

PLAYER VARIETY

- Rated on 8 adjustable factors.
- Left and right handed players.
- Range of batting types.
- Editor to amend game stats.
- Bowler types include seam, swing, change and both types of spin with 8 speed levels.

GAME OPTIONS

- 1 Day limited overs or test.
- White or coloured clothing.
- Three Cricket grounds.
- Load/Save game. Skill levels.
- Computer/Human players.

FRIENDLY CONTROLS

- Icon driven with point & click.
- Large 3D scrolling screen covering the entire playing area.
- Range of batting types.
- Editor to amend game stats.
- Bowler types include seam, swing, change and both types of spin with 8 speed levels.
- Joystick control of batsman's attack level, strokes and running between wickets.

STATISTICS

- Scorecard & bowling analysis.
- Weather and ground reports
- Wagon Wheel
- Manhattan Chart.



VARIABLE CONDITIONS

- Surface and pace of pitch
- Rain, bad light, cloud cover, temperature and humidity.

ANIMATED ACTION

- Sound Commentary.
- Umpire signals.
- All the strokes cut, pull, drive, etc.
- Appeals, dropped catches, run outs.
- Bouncers, wides and no balls.



24 HOUR CREDIT CARD HOTLINE

(0702) 600557



48 HOUR DISPATCH

CHEQUE PAYMENTS

If you have a guarantee cheque card or credit card please write its number on the reverse of your cheque to ensure dispatch within 48 hours of receipt.

OUR ADDRESS

ESP SOFTWARE DEPT SF
32A Southchurch Road,
Southend-on-Sea,
Essex SS1 2ND. England.
TEL (0702) 600557
FAX (0702) 613747

COMPUTER		MAIL ORDERS	
DESCRIPTION	S F	PRICE	TOTAL
PROFESSIONAL FOOTBALL MASTERS V4		24.95	
P.F.M. EDITOR V4		12.00	
STABLE MASTERS V2		24.95	
ORACLE RACING SYSTEM		75.00	
CRICKET MASTERS		24.95	
WORLD CUP CRICKET MASTERS		24.95	
CREDIT CARD NUMBER & EXPIRY		E. & O. E.	GRAND TOTAL
NAME		TELEPHONE	
ADDRESS		POSTCODE	

SPORTS RELATED PROGRAMS AND PROGRAMMERS WANTED

CANNON FODDER

NEW!

THE OFFICIAL PLAYING GUIDE

Don't be the Cannon Fodder
BEAT THE GAME...

● This new book is packed with crucial information on how to survive and conquer in the Cannon Fodder War Zone.

● Save your bacon . . . with our hints and tips to get you through those key moments in the game.

● Full walk-through instructions for **EVERY MISSION** to guide you to victory.

**ONLY
£9.95**

CREDIT CARD HOTLINE 0225 822511

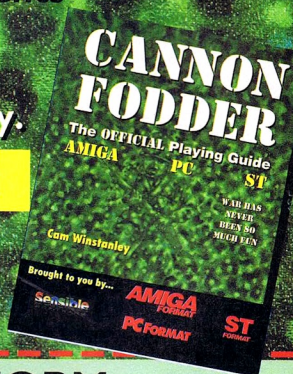
Brought to you by

**Sensible
SOFTWARE**

**PC
FORMAT**

**AMIGA
FORMAT**

**ST
FORMAT**



Jon Hare at Sensible Software says
"Buy this book - it's bloody great."

THE OFFICIAL PLAYING GUIDE ORDER FORM

YES!

I want to beat this blood thirsty game. Please send me this excellent NEW Cannon Fodder Playing Guide right away for only £9.95 inclusive of postage and packing.

Order Number FLB5254

Total amount due: £ _____ *Customers outside UK please add £4.00 for overseas delivery*

Name: _____ Your subscriber No: Q _____

Address: _____

Post Code: _____ Tel No: _____

☐ Visa ☐ Access ☐ Cheque (payable to Future Publishing Ltd)

Card No: Expiry Date: /

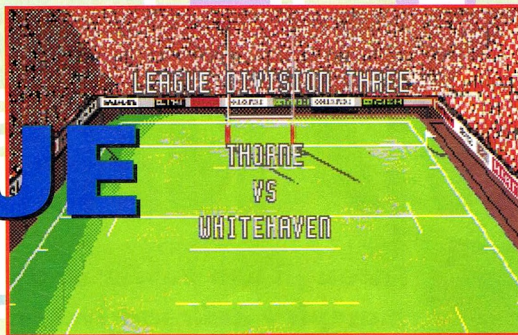
☐ Tick if you do not want to receive offers from other companies.

Return coupon to the following address (no stamp required):

CANNON FODDER OFFER, Future Publishing Ltd, FREEPOST BS4900, Somerton, Somerset, England, TA11 6BR.

**Future
PUBLISHING**

RUGBY LEAGUE COACH



■ Whitehaven haven't looked back since they got Michael Jackson on the team.

Life behind a desk playing a rugby management sim has to be better than life with your head under some Neanderthal's studded boot. Surely?

PREVIEW

PUBLISHER: AUDIOGENIC
PRICE: £TBA
EXPECTED: NOVEMBER

Rugby. What a great game. You get covered in mud while some git tries to shove his head up your bum, or, if that doesn't appeal, you can always stand on the sidelines, yelling garbled instructions at people rolling around in the mud. You know, "Chuck it over there." "Kill him." That sort of thing. No wonder people are turning to virtual games.

Audiogenic think they've come up with an answer in the form of *Rugby League Coach*, a program that enables you to do the shouting without getting muddy. You also get the responsibility of choosing who to put where in your team. Perhaps you'd like to put the weedy guys in the middle and leave the mountains of taut muscle and strained sinew standing on the sides with pom-poms. Whatever turns you on, really.

Alternative play

Yup - it's time for hardened sport fans to run screaming, when we mention that there are no action sequences in this game.

Problem? No... The point of a rugby management sim is to simulate rugby management. If Audiogenic had added a complete rugby arcade section, the

It's all over...

The game opens (and stays) at your manager's desk, on which you find paper trays, a phone, books, executive toys, coffee, and anything else a rugby coach could possibly want. Each item is used by dragging your 'hand' over the object and clicking. From here you can access everything you need to organise your team, and the game only veers from this screen when matches are played. As coach, you can take part in everything from telephone con-



■ You get a rugby coach, and a performance artist into the deal.



■ Derek was sent off shortly after God hit him.

■ In-match statistics can get quite tense...

versations (your manager shouts at you) to your personal diary (you're reminded to visit your manager for a good shouting). Team training is taken very seriously, and you're in charge of scheduling their activities from day to day and keeping morale up every step of the way.

The first thing to strike you about this release is that it's a fairly accurate representation of rugby management (as far as we non-rugby players could tell). You're in charge of everything from training through transfers to fan mail, and it's hard work. This isn't a game you fall straight into - you need practice, experience and intuition to win. The normal maths of sport management sims don't apply here, because each player's morale can slide independently of the rest of the team, and the success of the team as a whole depends on

more than the statistics they start the game with. Though the games aren't played in a fully animated real-time simulation, you still find yourself on the side of the pitch making decisions on injuries and tactics. Follow the thing through to the end, and you'll probably lose anyway. This doesn't mean you've lost the game, just that the chairman gets a little angry and you get a few nasty phone calls.

...bar the shouting

And that's the way *Rugby League Coach* works. This isn't a game you lose straight away, but a game you work at and then lose. The real measure of your success, as with every commercial venture, is your bank balance. Starting off with a fair chunk of cash, your main aim is to pile up yet more dough, offsetting the costs incurred in getting a team on to the pitch with winnings once there. If, by the end of your efforts, you have the most successful team in the league, you can still get sacked for making no money.

The most surprising thing about *Rugby League Coach* is that it's the first game of its kind - there have been countless football management sims, but never a rugby league simulation. Why this might be, we really don't know, but you can look forward to a full review in a month's time. **stf**

SIMON FORRESTER

■ Dorothy screamed as she was crushed by the massive folder.



PREMIER MANAGER 2



Through the power of its gameplay *Railroad Tycoon* came dangerously close to making train-spotters appear human. Now *Premier Manager 2* threatens to make footie statisticians respectable. What is the world coming to?

Quite why you start *Premier Manager 2* as the boss of some God-forsaken Conference team is beyond me. I want to hone a team of finely focused professionals to athletic excellence, not waste my time coaxing a bunch of has-beens and never-will-bes to glorious defeat in the third round of the FA Cup. Sadly the Premier League bit is only for good managers, those with the wit, tactical know-how and patience to get promoted or poached to the top flight of football. That rules me out then.

In the book?

Premier Manager 2 would have to have committed some major fouls to mess up its award-winning side. The upgrade would have had to have been a downgrade if it wasn't to be guaranteed a *FORMAT* Gold. Fortunately Gremlin have done more of a Newcastle than a Liverpool; the existing squad remains largely unchanged but a few new players have been signed up to add strength and depth in a few key areas.



■ Apparently this is what football managers see. It's just that Alex Ferguson gets to play with a bigger set than, say, John Ward (gawd bless 'im).

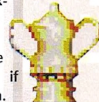
PLAYER	AM	TK	PS	SH	GR	FT	TRAINING	INTENSE
DIORS	14	10	5	10	31	100	100	100
TOWNS	12	25	12	9	19	94	100	100
VERBOR	6	20	1	7	28	93	100	100
SIMULTON	10	28	15	16	36	91	100	100
GRUSKAS	20	16	24	6	16	92	100	100
CHUMMER	11	15	37	20	92	100	100	100
BONES	5	20	20	8	20	92	100	100
MESON	8	10	25	18	31	93	100	100
HINGS	31	9	16	21	12	92	100	100
GILL	15	15	25	20	33	93	100	100
SWART	31	14	15	15	29	100	100	100
SCURCHARD	5	20	1	10	14	93	100	100
BROHLEY	5	20	1	10	14	93	100	100
BATHY	10	15	36	16	46	93	100	100

■ Make 'em sweat! Through clever coaching you teach your players how to: pass the ball, tackle, run, do their shoelaces, wipe their...

The icon interface offers the same level of quick, easy access and flexibility that players of the original already know and love. It's not exactly intuitive, but you'd have to be pretty dense not to get the hang of which icon does what over

the space of a few matches. And you will, obviously, lose these first few matches horribly, because you left the formation as 1-1-8 and are playing a keeper in the midfield. But that's not important right now.

What's important in *Premier Manager 2* is that you can. That is, you can do just about anything an aspiring Jerry Francis or Malcolm Allison might want. Naturally there's all the usual team stuff – training, tactics, contracts, transfers – but there is also a host of financial fiddles (sorry, did I say fiddles? I meant completely legitimate financial deals) such as club sponsorships and ticket prices to oversee. Quite why these jobs are your responsibility isn't explained but, as none of your pixelised staff seem willing to take them on, you have to handle everything personally if the readies are to roll in.



Spot (kick) the difference

What's new in version 2? For starters there's now: instant dismissal for bad managers, European transfer opportunities, 26-man squads, three subs per team, flexible bank rates, a limit of four foreign players in European games, 16 playing formations, eight training camps, mid-season job

offers, stacks of graphical and animation improvements, weather that can postpone games, European transfers, crowd control, individual player morale and fitness levels as well as 64 sponsors for your club. Oh and all the original bits are there too. Phew – what a scorer!



■ For some unknown reason you have to sully your hands with foul financial dealings and sponsorships.

The impossible footie compo

Now, by some good fortune we appear to have ended up with two review copies of *Premier Manager 2*, and rather than let our spare gather dust in corner we're willing to give it up – but only to a real football fan. So if you're the first person to answer the following five questions correctly a copy of *Premier Manager 2* will be yours!

- 1) Where would you find the Kippax Stand?
- 2) Who are the Us?

- 3) What is the record attendance at White Hart Lane?
- 4) How wide is the pitch at Vale Park?
- 5) Which club has fanzine called *D-Pleated*?

If you can answer those you deserve the prize – and probably medical help. Send your entries post-haste to: The Good Night Irene Compo, *ST FORMAT*, 30 Monmouth Street, Bath, Avon, BA1 2BW.

End-to-end stuff?

Premier Manager 2 is never going to be an easy game – not in the traditional sense. You have to read the manual. You have to pay meticulous attention to every detail of your club's performance. You have to keep a notepad by you to jot down ideas, names and prices. If

effects during play, you get the feeling that all the major sound effects have nipped down the Goat and Tricycle for a swift half, leaving the little 'uns to fend for themselves. This results in the usual lack of aural guidance, and the inevitable death of the little 'uns via the volume switch.



SON OF GASHEAD	BATH CITY	22 CONFERENCE
CONTRACT £32400	MONDAY	WEEK 10 OF 1994
CONFERENCE LEAGUE FORM		
CLUB	LEAGUE	FORM
DAGENHAM	■■■■■	■■■■■
ALTRINCHAM	■■■■■	■■■■■
HALIFAX TOWN	■■■■■	■■■■■
BURNCOB	■■■■■	■■■■■
STALYBRIDGE CLT	■■■■■	■■■■■
RITTON ALBION	■■■■■	■■■■■
GATESHEAD	■■■■■	■■■■■
WOKING	■■■■■	■■■■■
KETTERING TOWN	■■■■■	■■■■■
KIDDERMINSTER	■■■■■	■■■■■
MELTING UTD	■■■■■	■■■■■
SOUTHPORT	■■■■■	■■■■■
SLOUGH TOWN	■■■■■	■■■■■
MORTHMICH VICT	■■■■■	■■■■■
MACCLESFIELD TOWN	■■■■■	■■■■■
TELFORD UTD	■■■■■	■■■■■
STAFFORD RANGERS	■■■■■	■■■■■
MERTHYR TYDFIL	■■■■■	■■■■■
YEOVIL TOWN	■■■■■	■■■■■
BROSGROVE	■■■■■	■■■■■
DOVER ATHLETIC	■■■■■	■■■■■
BATH CITY	■■■■■	■■■■■

■ With the aid of a Peter Snow-style swing-O-meter we can see the mighty Bath City plummet to obscurity (even falling below Macclesfield Town).

you can muster this level of concentration then success comes just as speedily as it did first time around – in the original game Gashead won the European Cup in back-to-back seasons! If you can't apply yourself to this extent your employers are eager to boot you into touch.

Sporting pleasant graphics *Premier Manager 2* offers a friendly (inter)face in the hostile world of football management. Far less welcoming are the sound effects – which go out of their way to avoid saying hello at all. With only a whistle, bleep and other inane spot

Classified results

Premier Manager 2 is a complete footie management sim. It's almost good enough to make the leap into mainstream gaming. You do have to be into football, but not massively, and it's all too easy to get hooked by the spreadsheet machinations needed to kick your bunch of donkeys into action. **stf**

TRENTON WEBB

Premier Manager 2

£25.99 Gremlin Graphics
0742 753423

Higs

- Deep but still accessible
- Looks great
- Once hooked you'll be playing for months

Lows

- Too few sounds

91%

Unbelievable graphics

Unstoppable power

Untouchable excitement

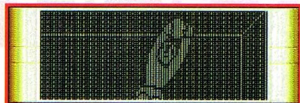
Ultimate

Future Games

The next generation

The magazine

The 1st of November 1994



■ The match unfolds, each dramatic moment being displayed on the 'scoreboard'. Here Lightbulbboy stops a shot from Bigpoxman.

SPHERICAL

Dubious references to spherical objects abounded in the STF office as we grappled with this new release from Holland.

There's no escaping it – this game is all about balls. There are bricks, pipes and even the occasional triangular thingy, but the final level is all balls.

Every new platform game needs at least some excuse for a plot to justify its existence, and *Spherical* is no exception. This time you've been transported to the 13th Dimension by a mad scientist,

and mad, evil people have nothing better to do on a Saturday afternoon (or even the rest of the week). Of course, when you actually come to play the game it makes no use of these facts, but at least you don't have to read a 30-page manual before playing only to find there's nothing helpful in it.

Michellin Men



■ Arggh! The Michellin man is viciously assaulted, then engulfed, by a blue ball.

who's intent on destroying the world and, surprise surprise! you're the only one who can stop him. Why he wants to do this is obvious – it's because he's mad and evil,

snakes and birds to the plain bizarre – a bouncing blob with a Scorpion-like tail, for example. To destroy these you can either run into them in a mad suicidal dash or,



■ The first screen. Now you might not believe us here, especially having seen the screenshots, but *Spherical*'s a platform game. Yep, another one.

if you're feeling more sensible, you can fire at them. Firing while sta-

tionary or moving in any direction other

"It's frustratingly tedious being sent back to the beginning of the first world every time you end the game"

than down unleashes up to three green bullets. Alternatively, if you're feeling particularly cowardly (or sensible, depending on your viewpoint) you can crouch down and lob red bouncing bombs from a safe distance. However, you tend to find that unsporting creatures (like birds) then start shelling you from above, and that you often have to adopt a dodge-and-fire tactic if you're going to safely navigate certain screens without getting blown to (slightly ragged) pieces.

This is especially true when you reach the end of

each world only to find a loathsome Guardian suspended on four web-like strands (enabling it to move around as it fires) blocking your progress to the next world. You must destroy each strand in turn if you're to travel on to the next world.

To complete a world you merely need to get from one side to the other – you



■ Hang around too long and a bumble bee appears, ready to sting you to oblivion.

HINTS 'N' TIPS

- 1 Don't hang around on each screen. Otherwise a seemingly invulnerable bee attacks from nowhere and is virtually impossible to escape.
- 2 Remember you can only have three bombs or bullets on screen at any time. Firing any more merely destroys the earlier shells, which means you're having no effect on your enemies.
- 3 Beware of traps. Some, like falling spikes, you can see and avoid, but others are invisible until you spring them. Your only option here is to make a careful note of where they fall and avoid them next time. If you remember.
- 4 Don't despair if you find yourself in what appears to be a dead end. Some blocks can be removed by blasting them with either bullets or bombs, giving you access to the next screen.
- 5 When battling end-of-level monsters, try to get as close as possible. They fire more rapidly the further away from you they are.

■ Two clues to the name of this level: It's full of balls, and it's the name of the game. Hmm, tough one that...

GETTING HOLD OF IT

At present, Fusion Designs don't have a distributor for *Spherical* in the UK, but you can order the game direct from them at £13.99 (including P&P) per copy. Just make out a

cheque or postal order for £13.99, payable to Fusion Designs, and then send your order to: Fusion Designs, PO Box 3592, Rotterdam, 3003 AN, The Netherlands. And sit and wait.

don't have to kill all the monsters first – which is something of a relief. Nevertheless, this often means sacrificing the various bonuses that exist to help you on your way. Most, like spinning coins and flashing stars, add to your score. Meanwhile other more useful bonuses have a variety of effects, from restoring lives and energy to killing all the monsters on screen to making you indestructible (but not to traps) for a time.

Balls

As you progress through the various worlds, you notice that each has a main element, which has a

particularly, where your shots are deflected all over the place. Aside from a rendition of *Puff the Magic Dragon* at the beginning, sound is reduced to a few spot FX and a manic laugh at the end of each game to accompany your demise.

It's frustratingly tedious being sent back to the beginning of the first world every time you end the game, no matter how far you've progressed. The authors should have included a level code enabling you to skip earlier worlds that you've already completed. This situation is worsened further by the "passive traps" scattered around, which spell unavoidable death and



■ The nasty looking Guardian of the Genocle World. Owl Gerroff!

real bearing on the gameplay. Level two, Centaurus, is made up of pipes, while levels three and four, Triangulum and Spherical, are made up of... of... No, it's gone. Anyway, this is most apparent in *Spherical*, in which the rounded surfaces play havoc with your shots, especially the bouncing bombs. There's nothing worse than confidently firing off the maximum permitted three shots at an enemy who's rapidly bearing down on you, only to find two of them deflect back towards you. While your own firepower doesn't inflict any damage on your precious existence, you still have the rapidly approaching monster to deal with.

Verdict

If you like platform games then *Spherical* is worth a look, but at £13.99 it's an expensive one. The graphics are small and slightly simplistic, yet there is some variety between screens. The collision detection plays a vital role in the gameplay – in the *Spherical* level,

the loss of yet another life. While these traps don't move around you do tend to get annoyed when, having struggled past various monsters, you're killed by a falling block. This is a pity because *Spherical* is pitched at the right level of difficulty, allowing just enough progress each time you play. *Spherical* could have been a mildly addictive, enjoyable romp, but is let down by a lack of originality and level codes, and its high price-tag.

NICK PEERS

Spherical

£13.99 (see box)
Fusion Design

Highs

- A challenge, but not impossible
- Hours of play possible...

Lows

- ...if you can face starting afresh every time
- Yet another platformer

56%

Future
Publishing

Sony PlayStation • Nintendo Ultra 64
Sega Saturn • Atari Jaguar • 3DO
Arcade • Mega 32 • NEC FX • Neo Geo
CD • CD-ROM • CD-i



Ultimate

Future Games

Exclusive hyper-games of the future:
explore them...

Super new-generation console magazine:
experience it...

Premier issue on sale NOVEMBER 1st:

Access
Show
Features



Amiga Format



CD-ROM Today



Games Arcade



Productivity



PC Theatres



Games
Championship
Final



Future Music

Your favourite magazines come to life...

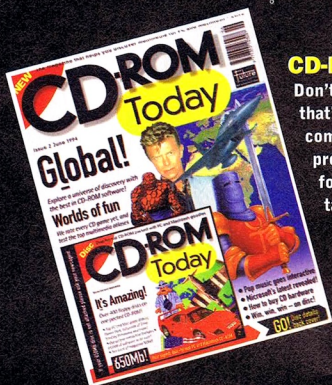
The Future Music Feature

Come to The Future Music Feature – discover the amazing world of modern music and find out how you can make music for yourself without having to spend a fortune or take years learning to play. Music is one of the most exciting areas of computer use, but so few people get involved: we can show you how! And if you're a musician already, we'll have all the most exciting new kit lined up for you to try, and lots of experts on hand to help you explore new ideas!



CD-ROM Today Area

Don't miss the CD-ROM Today Area, where you'll be able to see everything that's new on compact disc – currently the most exciting area of leisure computing. See and try the latest games, edutainment and multimedia products on disc, perhaps buy a CD-ROM drive or multimedia expansion for your computer from one of the many dealers at the Show, and get a taste of the future with MPEG, FMV and more. Co-sponsored by OPUS.



OPUS technology

Special Computing Theatres

Our Theatre areas will be the focal points of the show, with magazine experts, industry gurus and the world's top software developers running seminars, demonstrating new products, explaining how you can get more from the machines and software you already own and revealing tomorrow's technology today!



Earls Court 2,
London

26th-30th
October

Productivity Forum

Get more out of your computing with the Productivity Area, specially designed to show you how you can do things you never knew were possible, and to help you find solutions to those awkward problems. There's everything here in the way of software answers, from sorting out money to creating your own publications. It makes sense!

The Future Entertainment Show

Earls Court 2
26th - 30th October 1994

See the future!

The next generation in interactive entertainment and leisure computing revealed

Get more from your machine!

Theatres, seminars, demonstrations, discussions, advice from the experts

Try it yourself!

Test drive all the latest hardware and software releases

Pick up a bargain!

Shop around and save money at the many dealer stands

Tickets on the door £7, in advance £6.
Save time and money – book now!

Ring our hotline number: 0369 4235
or fill in this coupon:

Please reserve the following tickets for me:
Advance booking £6 each

Number required ☐ Ticket Total £ _____

Save 50p - pay £1.50 now and reserve your showguide for collection on the door.

Please tick box if required ☐ GrandeTotal £ _____

Method of payment: (please tick)

☐ Cheque (payable to Future Entertainment Show)

☐ Access ☐ Postal Order ☐ Visa

Credit card number:

□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □

Expiry date: □ □ □ □

☐ Please tick here if you do not wish to receive direct mail from other companies

Name _____

Address _____

Postcode _____

Date / / 94

Tel _____

Signature _____

Please note that the tickets will be sent to you eight weeks before the Show. Please return this form and your payment to the address below

The Future Entertainment Show, PO Box 9, Dunoon, Argyll PA23 8QQ STF 10



THE BEST PD GAME EVER?

They said this was no ordinary PD game... and they were right.

Starball is a game with real balls. There, I've said it. If you want more dodgy references to round objects you'd better turn to page 60 and read the *Spherical* review. This game has so much going for it that there just isn't the time or space to pad out the review with dubious comments.

What's so great about *Starball*? Look beyond the smoothly animated intro, complete with impressive deep-bass soundtrack, because for once it doesn't exist merely to hide a jaded, disappointing game behind a flashy exterior.

The excellence of the game's smoothly-scrolling graphics is only rivalled by its addictiveness. A host of features and bonuses liven it up, ensuring that it doesn't become repetitive, as other pinball games can. Even if you're not an incredibly talented pinball ace you'll find it's not too difficult to keep playing without losing lives. It manages to be frustrating and yet still fun.

Eggball and Llamazap?

One of the most attractive things about *Starball* is the subgames you find as you play. So far we've discovered four: Space Invaders, Arkanoid, Llamazap and Eggball. Value for money.

Starball's available from your local PD library for the price of a disk and a stamp, and is definitely worth the paltry £5 shareware registration fee. See the read-me file for more details on registering your

■ *Starball* in all its glory. Now where's that Jimmy Hill chin bonus got to?



■ Blast the egg open and kill the monsters inside it, in the Eggball subgame. Shouldn't take a lot of eggging on to do it. (Sorry.)

copy, as well as installing *Starball* to work on a 512K machine.

What more can be said? Get this game, get playing, and have a good laugh at all those console owners who shell out £40-50 for this kind of stuff. And just be grateful that it arrived in our office after most of this month's magazine was finished, or else there wouldn't have been a magazine here for you to read. **stf**

NICK PEERS

Starball

Shareware from Volume 11 Software Development
Available from any good PD library (see page 52)
ST/Falcon, 512K

Highs

- Graphics, sound, features, additive qualities...
- Lots of little surprises to keep your interest up

Lows

- Um... er... there's a Jimmy Hill chin bonus

96%



14 Destroy all the little purple men in your endless quest to expel the slime (or something...) and this woman provides more, via her red lips.

13 Four little light things which, when lit in the right combination, do all manner of wonderful things including restoring lives.

12 Yet another space-time warp.

11 This little hole exists merely to launch your steel ball towards those purple hooded men.

10 ...however, if the ball lands in here, the guns are completely repaired, undoing all your hard work.

9 Here lie two rather unsporting gun emplacements who periodically fire missiles in an attempt to destroy your rocket ship. They are destroyed by being lit.

8 Various elements in this section add up to build a space rocket which, once completed, holds the key to entering yet another subgame.

7 Another hole, this time protected by a forcefield, which holds all manner of nice bonuses for you.

6 Landing the ball in this space-time warp can literally turn you upside-down!

5 Firing the ball into here sets off loads of groovy happenings - kickbacks being just one of them...

4 This head is the key to so much in the game, including the infamous Jimmy Hill chin bonus...

3 The mouth of this fly could set you on the way to another subgame if the right conditions have been set (hint, try landing the ball in the fly's mouth).

2 This little fellow must be pleased with you when he grins widely - you can't lose the ball down here while he's doing so.

1 Obviously this is where the ball is launched. Apply the right amount of pressure when firing the ball, and you could well be on the way to accessing one of the many subgames.

(E&OE

[illegible]

E & OE

SAVE £1 an issue plus get

STREET FIGHT 2

ST

FORMAT

SIMPLY THE BEST!

the largest set of information! The program, encyclopedia and dictionary are all yours for \$19.95 and 10 bonus games included!

9 CHAMPION PROGRAMS!

SEE BACK COVER FOR TUE-1 DISK OFFER!



ST
FORMAT
ENCLOSURE
STREET FIGHT 2

THE NEW

STREET FIGHT 2

THE NEW MONTH'S

STREET FIGHT 2 is the most exciting and challenging fighting game ever! It's the only one with 10 different fighting styles and 10 different weapons!

AND YOU

CHEAT SHEET

STREET FIGHT 2 CHEAT SHEET

STREET FIGHT 2 CHEAT SHEET

STREET FIGHT 2 CHEAT SHEET

STREET FIGHT 2 CHEAT SHEET



THE DEFINITIVE ST GUIDE TO:

- CLANICS
- MUSIC
- GAMES
- COMICS
- DRUGS
- TELEVISION
- EDUCATION
- THE CURE
- SPRINKLED RICE
- WINDING PROCESSIONS
- PUBLIC DOMAIN
- STREET FIGHT 2
- STREET FIGHT 2

An extra disk and newsletter EVERY MONTH!

Subscribing to *ST FORMAT* is absolutely amazing value for money. Just look at what you get:

■ SAVE up to £12 a year.

■ FREE SUBSCRIBERS' DISK
jam-packed with software
every month.

FREE BINDER worth £5.95 with Direct Debits.

FREE MONTHLY DISK AND

When you subscribe to ST FORMAT, you receive a special disk complete with full instructions – not just once but every single month. We include software that we can't cram on to the main Cover Disk, making it even more exciting. Just look at this month's amazing Wonder Disk selection

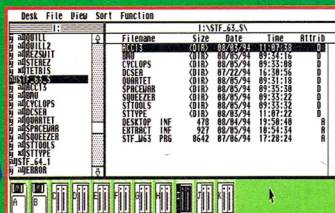


■ **Make all manner of new enemies with Spacewar 2000. There's nowt like it.**



■ You can even change the ratings for songs with *Tape Squeezer*. Excellent!

■ CYCLOPS – A smart password protector for your files. If you want to keep your data safe then use *Cyclops* .



■ **Don't take our word for it - just look at what ST Tools makes of this month's Wonder Disk.**

■ SPACEWAR 2000 – Superb head-to-head space duel in a classic arcade style. Fly customised ships in a duel against friends, family and other people you don't like.

■ TAPE SQUEEZER - A splendid demo of a CD-to-tape transfer tool. You tell it the track lengths and it juggles them to fit on a C90/C60.

■ QUARTET SAMPLES – 37
weird and wonderful new AVR
files to play with!

HOTLINE: 0225 822511

SUBSCRIBE SUBSCRIBE SUBSCRIBE

a bonus disk every month!

■ **FREE SUBSCRIBER NEWSLETTER** including full instructions for the subscribers' Wonder Disk.

**SAVE
£1
AN ISSUE**

■ **PLUS full price protection for a whole year and FREE delivery to your home (UK Only).**

■ **Subscribe to STF TODAY!**
You know it makes sense!

NEWSLETTER!



■ **Between the Covers.** The monthly ST FORMAT subscribers' newsletter, filled with info, fact and even a fair bit of fun.

■ **Just look at all those lovely samples. And they're yours to keep if you're a subscriber.**

■ **ST TOOLS - PC Tools-style GEM utility for your ST**

■ **STTYPE - Turn an ST and printer into a typewriter!**

■ **DCSEA - Self-extracting file creator.**

■ **ACCESSORY v1.3 - Clean up your Desktop, fast!**

■ **BACKGROUND MUSIC UTILITY - Have your ST play music as you render, word process, manipulate those spreadsheets...**

SUBSCRIPTIONS

Please enrol me as a subscriber to **ST FORMAT** (12 issues) from the next available issue, at the all-in price of (tick one):

☐ **UK £33.00**

☐ **UK Direct Debit £30.00 + FREE STF Binder**

☐ **Europe (airmail) £60.95**

☐ **Rest of world £90.95**

Note: If you are planning to subscribe by Direct Debit fill in the DD form, and send it along with your details completed on the order form. The Direct Debit option is the easy way to pay but is only available to subscribers who have a UK based sterling bank account. Direct Debit payments are deducted in advance.

Name (Mr/Mrs/Miss/Ms) Initials

Address

Postcode

Telephone EEC VAT No

I would like to pay by

Cheque (payable to Future Publishing Ltd) ☐

Visa ☐ Access ☐ Direct debit ☐ Total amount payable: £.....

Credit card no

Expiry date

Date Signature

Please tick if you would prefer not to receive notice of any special offers or new products ☐

OFFER CLOSES 30 OCTOBER 1994

STF/MAG/1094

Return the coupon to the following address (no stamp required):

ST FORMAT SUBSCRIPTIONS, FREEPOST (BS4900), Somerton, Somerset TA11 6BR

SAVE £3 MORE!

Plus FREE ST FORMAT binder worth £5.95 when you pay by Direct Debit!

DIRECT DEBIT INSTRUCTIONS ID: 930763
Pay by direct debit and save yourself £1

This coupon instructs your bank or building society to make payments direct from your account. Please complete then send to: **STF Direct Debit Subscriptions, Future Publishing Ltd, FREEPOST, Somerton, Somerset TA11 6BR** (Banks and building societies may refuse to accept instructions to pay direct debits from some types of accounts.)

2. Account number:

3. Sort code:

4. Account in the name of:

Instructions to bank/building society

■ I instruct you to pay direct debits from my account at the request of Future Publishing Ltd.

■ The amounts are variable and may be debited on various dates. I understand that Future Publishing Ltd may change the amounts and dates only after giving me prior notice.

■ I will inform you in writing if I wish to cancel this instruction.

■ I understand that if any direct debit is paid which breaks the terms of this instruction, you will make a refund.

Signed

Date

1. Please write the full address of your branch

To: The Manager

Bank/Building Society

Address

Postcode

(8.45am - 6pm)

ST ANSWERS

Breaking off his battle with the Lectroids from Planet 10 (led by Dr Emilio Lizardo) Clive Parker dives into another heap of your ST problems.

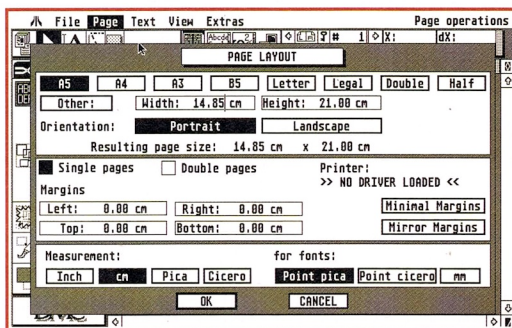
Sideways

PRINTERS Is there a program that will enable me to print word processor and DTP documents sideways so I can fold an A4 sheet of paper to create an A5 size magazine?

Frank Edmundson, Burnley

A It depends entirely on the word processor you are using. Many of the newer document processors like Papyrus enable you to print in landscape format instead of the more usual portrait orientation, while older software like 1st Word Plus doesn't have this ability. Anyway, if you're creating an A5 magazine then all you have to do is create the text in a word processor and save it as plain ASCII, and you can then import the text straight into whatever DTP program you use.

All DTP programs enable you to choose a landscape A4 layout when you design your document, by defining the page layout before you start importing text written in a word processor. If you haven't got a DTP pro-



■ We'd like to open with a stunning, full-colour, rendered, screenshot of an unbelievably powerful package. Here's a shot of Calamus 1.09n instead.

gram then you should seriously consider getting Calamus 1.09n, which is still available from JCA Europe (☎ 0734 452416) for £79.99. You'll need at least 1MByte of memory and a high-resolution monitor to do any serious DTP work on your ST, as well as a decent 24-pin or inkjet printer.

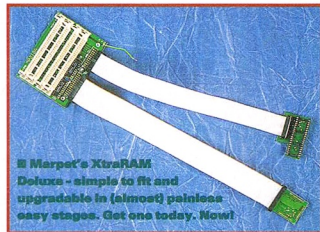
Zulu War

HARDWARE I am a member of the Anglo-Zulu War Research Society and we want to produce a journal using a 520STFM we have just purchased. We want to use 1st Word Plus and Timeworks 2 to create the journal – do we need to

upgrade our ST to run this software? If we do, what's the best way of getting the upgrade?

A J Cherry, Launceston

A You'll have no problems running 1st Word Plus on a 520STFM but you need at least 1MByte of RAM to run Timeworks 2. The best memory upgrade for the STFM is the Marpet XtraRAM Deluxe, which enables you to upgrade your memory in stages to 1MByte, 2MBytes or 4MBytes using SIMM memory boards – see the Power Up feature in ST FORMAT 62 for details on upgrad-



■ Marpet's XtraRAM Deluxe – simple to fit and upgradeable in (almost) painless easy stages. Get one today. Now!

SOUND

MUSIC AND MIDI

Andy Curtis straps himself in, turns up the bass and roars off in a cloud of flying sausages. His brain's out on loan.

I've got the power

I have a Yamaha SY55 and the little black external power supply has developed a fault – it keeps crackling and the display flashes. I guess I have to get a new one but the price is very high. Given that it is a DC 9 volt output can I just use any normal power supply, like the adjustable ones, or do I have to get a Yamaha original for it to work? I did try one but nothing happened. I hope I haven't broken the keyboard.

Gerald Lunas, Folkestone

stf: It is possible to run Yamaha keyboards from standard consumer power supplies from electrical stores but be careful which one you buy. Make sure it can provide enough current to drive the keyboard and provides the correct voltage. If the voltage is correct but nothing happens then you may have the polarity the wrong way round so try it the other way. If none of this makes sense then we strongly advise you to buy the one that Yamaha suggests. It isn't much more expensive than a non-specific one.

High-res tracking

I have seen a lot of soundtracker replay programs which work in low resolution but there seem to be none that work in high resolution. What do I do if I want to listen to MOD files whilst in high res?

Simon Rollerford, Belfast

stf: There are two main options here: Paula and Jukebox, each of which will do the job quite adequately. The great news is that they are both Shareware, which means you can download them from your favourite BBS or get hold of them from any good PD library.

Last but not least

I have quite a few MIDI pieces of equipment. I have a problem with my new drum machine because it only has a MIDI In socket and no Thru port. How do I insert it into the chain of MIDI gear? Do I need to get a MIDI Thru box?

Martin Termine, Sussex

stf: You're gonna kick yourself when we tell you, Martin. Simply make the drum machine the last MIDI device in the chain! That way it won't need to have a Thru port. If you have more than three or four MIDI devices in a chain, however, we would advise you to get hold of a MIDI Thru box just to be on the safe side.

Multi-track recording

I have been sequencing using my Atari ST for some time now and it has always been just me and the computer. I have just joined a band and we want to record using the computer. The trouble is that I have only ever recorded one part at a time. How would I go about recording two synths being played at the same time on to separate tracks?

Derek Gray, Durham

stf: Most sequencers have a function called Multi-record or something similar. This tells it to create a track for each separate MIDI channel it receives. Check your sequencer manual for more info. The next problem is feeding two synths on separate MIDI channels into the MIDI In socket on your ST. This is achieved using a MIDI merge box, which takes two or more separate MIDI inputs and combines them. Expect to pay £80-100 for a good one.

Stepping stones

I have been sequencing for some time now using step-time entry for notes. Although it is a little clumsy to do, the results have been good. I have faithfully copied the notes from many pieces of sheet music but some of the sequences are rather boring and unrewarding. What am I doing wrong?

Juliet Soames, Reading

stf: There are three main points to bear in mind. The first is that sheet music is an interpretation of a song reduced to a piano score. Some sheet music is done well, some abysmally. Since you are copying direct, abysmal sheet music will sound abysmal on your sequencer.

Secondly, step-time entry can be limiting because you are likely to enter notes too exactly. Use of a 'humanise' or 'un-quantize' feature could help here. Lastly, there is the question of expression. Step entry usually gives all notes the same velocity. If you don't change this then the piece is bound to sound expressionless. Pursue the 'humanise' feature, play around with note velocities and don't be afraid to add your own musical ideas.

ing your ST. The 1MByte upgrade costs £34.95 and the 2MByte upgrade £60 – call Marpet on 0423 712600 to check current prices because SIMM price vary from week to week. The usual rule is to buy as much memory as you can afford.

CD-ROM Today

HARD DISK In the January 1993 issue of ST FORMAT you published an article on the future of multimedia and the ST. I am interested in your comments on CD-ROM, particularly the adaptor that enables you to run a CD-ROM drive with an ST. You also referred to software enabling PC CD-ROMs to be read by an ST – can you tell me the name of the software and which PC disks can be read on the ST using this combination? I am interested in clip-art and graphics.

Richard Chiswell, Edinburgh

A First of all you need to get yourself two bits of hardware – a SCSI CD-ROM drive and the Link 2 – and a piece of software called ExtendoS. The cheapest way to get a CD-ROM drive is to take a look at the ads in MacFormat – you can get the Apple CD-300 drive for between £150 and £175 if you shop around. Next you need the Link 2, which is available from First Computer Centre (0532 319444) for £84.95, and enables you to connect your ST to a SCSI CD-ROM drive or any other SCSI device. Finally you need ExtendoS from System Solutions (0753 832212), which costs £29.95 and is compatible with scores of CD-ROM drives including the Apple CD-300.

You can read the data on almost any PC-compatible CD-ROM drive using the above setup, but remember that just because you can read the data

ATARI CLUBS AND USER GROUPS

Do you run an Atari ST or Falcon club or user group? Do you know of a local group? If you do then send details to Atari User Groups, ST Answers, ST FORMAT, 30 Monmouth Street, Bath BA1 2BW and we'll print the details every month in ST Answers. Remember to send an SAE to the club you want to join so they can send you information about themselves.

Atari Update & Dynamic Publications, 22 Brook Road, Isle of Wight PO37 7LU.
Atari Yamaha User, 49 Summerfield Road, Wythenshaw, Manchester M22 1AE.

Falcon Fact File (FFF), 11 Pound Meadow, Whitchurch, Hampshire G28 7LG.

Falcon Owners Group (FOG), PO Box 353, Stafford ST17 9US.

ICTARI User Group, 63 Woolsbridge Road, Ashley Heath, Ringwood, Hants BH24 2LX. Atari programmers user group, monthly disk.

ST Handbook, 1 Fordhouse Lane, Stinchley, Birmingham B30 2NH. Bi-monthly AS magazine and disk, £2.
Stellar Atari ST Club, Newholme, Aston Road, Chipping Campden, Glos GL55. Monthly diskzine and PD catalogue if you send SAE and blank disk.

on a PC CD-ROM doesn't mean you can run the PC software that's on it – you need a PC to do that! However, you can read images in any picture format, and use sound samples, MOD music files, MIDI data and ASCII text files.

You'll need a couple of PD graphics programs and sound sample conversion programs to use much of the information, but if your graphics and DTP software can cope with GIF, TIFF, Targa and JPEG format images you'll have no problems. If you need a catalogue of CD-ROM then contact Unica on 061 429 0241. Ask them nicely and they'll send you one.

Networking

SOFTWARE I have a Falcon and an ST linked together on a network. When running Timeworks from floppy disk in my ST how can I get the ST to look for the Timeworks fonts on the hard drive of the Falcon (Drive N) instead of on the floppy disk in Drive A of my ST?

David Thew, Northumberland

A The easiest thing to do is to install Timeworks on your Falcon's hard drive and simply load the pro-

gram over the network from Drive N instead of loading from floppy disk. This makes Timeworks look for the fonts in the correct place on the Falcon hard drive automatically.

Sorry, the answer is still "no"

HARDWARE In an old ST FORMAT you said that it's impossible to run PC games on an ST using a PC emulator because most games need a VGA monitor. If I get a PC emulator for my Falcon and VGA monitor can I now play PC games?

P R Nelson, Minneapolis

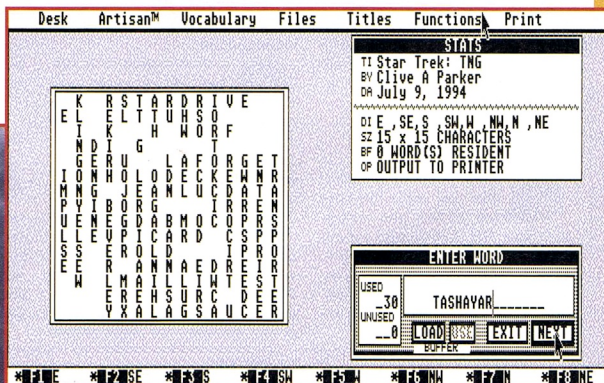
A Sorry, the answer is still no. PC emulators are designed to let you run relatively simple, non-graphics-intensive applications like word processors, databases and spreadsheets. Even these run slowly when compared with modest 16MHz PCs. If you want to play PC games then you need a PC. Why not buy a Jaguar instead?

A There are no plans for a Jaguar emulator for the Falcon, and it's unlikely that it would be possible to cram the Jaguar's custom hardware on to an expansion board small enough to fit inside the Falcon. The PC has huge 32-bit expansion slots about 30cm in length, big enough to mount extra hard drives upon. Remember that Atari aren't making the Jaguar boards for the PC – they've licensed the technology to a third party PC developer who is building and marketing the Jag boards.

Failed quest

DISKS I've had a problem unpacking the Word Quiz 4 program on the Cover Disk of ST FORMAT 61. Every time I run WQ1.PRG on my 520STFM it crashes with two bombs. Is there a problem with the disk or with my ST? I've never had any problems with unpacking any other software on your Cover Disks.

Mrs D M Hains, Warrington



■ Our deep and humble apologies. Word Quiz 4 needs a blitter chip to run because the intro screen scrolls into place on your monitor (and I thought blitter chip was some kind of obscure Northern expression - Ed).

Jagwah emulator

HARDWARE Is there a Jaguar emulator being developed for the Falcon that's similar to the one being designed for the PC? If not, why won't Atari make one.

Jeff Wayne, London

A No, there's no problem with the disk or the Word Quiz 4 program itself. The problem is that your STFM doesn't have a blitter chip installed. Because all the STFMs in the ST FORMAT office have blitter chips, we were unaware of the problem until



■ Now this is more like it. You can use images like this one from the Space and Astronomy CD-ROM with your ST. Impress the opposite sex! Buy it today!



GFA ANSWERS

Mac Marsden takes a look at all your GFA problems while wondering how to prove that he actually exists in the space-time continuum at a quantum level. Er, yes...

Loop d' loop

I have a loop in my program from 0 to 1,000. I would like it to branch to another Procedure after every tenth pass, but the only way I can figure out how to do it is using 100 consecutive IF statements as follows:

```
IF F=10
IF F=20
IF F=30
```

up to:

```
IF F=990
```

This is a lot of pointless coding but I can't think of any other way to do it. Please can you help?

Alan Craimer, County Durham

stf: The best method we have come up with is to use the operator MOD. In the code listed below, we say IF F MOD 10=0, or in plain English, if F is a multiple of ten – 10, 20, 30 and so on – then go and do something, otherwise do nothing:

```
F=0
DO
  IF F MOD 10=0
    ! BRANCH TO YOUR PROCEDURE
  ENDF
  ! YOUR PROGRAM CODE HERE . . . . .
  F=F+1
LOOP UNTIL F>1000
```

Do I exist?

I am writing a program and I want to test that a specific file is on either the hard drive or on floppy disk before the program continues. I have searched for a solution but I have been unable to find one.

Allison Digree, Yeovil

stf: You need to use the IF EXIST command using the following parameters:

```
IF EXIST
  ("(drive):\[Directory]\[Filename].[Extension]
  ")
```

This checks the path entered for the required file name, if you omit the file name as follows:

```
IF EXIST ("A:\FORMAT*.*)")
```

you can check that a directory exists as long as the directory contains at least one program file. We have included a sample listing for checking Drive A for a file named FORMAT.PRG in a directory called ST:

```
IF EXIST ("A:\ST\FORMAT.PRG")
  ! YOUR CODE HERE, FILE EXISTS.
ELSE
  ! DO SOMETHING ELSE, NO FILE FOUND.
ENDIF
```

Turn me off

I enjoy using sound in the programs I write for my six year old daughter, but sometimes the sound continues after the time I have specified, and I have been unable to find a command to switch off the sound. Is there such a command and, if so, please could you include an example?

Jerry Thompson, Northumberland

stf: The instruction you have been looking for is WAVE 0,0. This turns off any running SOUND statements. With the parameters at 0,0 the sounds are turned off, but you can set WAVE up to alter the sounds produced by SOUND. Try this example of how to turn off the sound.

```
SOUND 1,15,8,6,500 ! SOUND A NOTE FOR 10 SECONDS
PRINT "PRESS ANY KEY, YOU HAVE 10 SECONDS"
-INP(2) ! WAIT FOR KEYPRESS
WAVE 0,0 ! TURN OFF ALL SOUND
```

Increased size

I am writing a database program and was wondering if there is a command to increase the size of a string array such as FILE\$() without losing any of the data already held in that array? I want to store X number of files, but if the person using the database wants to increase the size of the database then I want to include an option for him to be able to increase allocated memory so that he can have an unlimited number of files, depending on RAM and disk size.

Martyn Andrews, Pontypriid

stf: It is possible to do what you want in GFA Basic. First you need to ERASE the old FILE\$() set and then re-dimension it. But to retain the data you must create another dimensioned array of the same size as the original in which you can temporarily store the data while you ERASE and RE-DIM FILE\$(). To get you started:

```
DIM FILE$(200)
DIM TEMP$(200)
! FILL ALL FILE$( ) WITH DUMMY TEXT
FOR F=1 TO 200
  FILE$(F)="dummy text"
NEXT F
! SWAP DATA TO TEMP$( )
FOR F=1 TO 200
  TEMP$(F)=FILE$(F)
NEXT F
! ERASE DIMENSIONED ARRAY FILE$( )
ERASE FILE$( )
! RE-DIMENSION ARRAY FILE$( WITH 100 EXTRA ALLOCATED MEMORY
! AREAS
DIM FILE$(300)
! RETURN DATA TO FILE$( )
FOR F=1 TO 200
  FILE$(F)=TEMP$(F)
NEXT F
```

The next time the user wishes to increase the memory allocation, the loop to 200 must be increased to 200+increase, so the best option is to use an integer variable as the final number in the loop. The SAVE and LOAD procedures must be able to cope with the new data sizes.

it was too late. We're looking for a similar wordsearch program to run on a future Cover Disk. Apologies to everyone who was disappointed.

On-line help

I was surprised to notice that you didn't mention the on-line help facility built into STS 2.06 in your recent features in STS FORMAT. All you have to do is press the <Help> key when you are on the Desktop and an alert box opens with a list of functions and short cuts.

Paul Shillito, Staffordshire

A Yes, we do know about the <Help> key-press in STS 2.06 – it's in the manual – but thanks for pointing it out anyway. We're going to severely reprimand Clive with a baseball bat just as soon as we find where he's hiding. You do realise you've spoilt the next part of Clive's STS 2 guide, which is provisionally titled STS 2: A Spaced Odyssey.

Lead me on

I think I need a SCART lead to connect my VideoMaster cartridge to my video recorder, but my video doesn't have a SCART socket. What can I do?

Reg Barclay, Murdock

A You'll have to take a good look at your VCR. If there aren't any round phono sockets on the back of your VCR, marked Audio Out and Video Out, then see if there are any concealed flaps on the front of your machine – the phono sockets

are sometimes hidden away like this. Without more details of your VCR it's difficult to be precise.

Sound and Vision

I am thinking of buying a sound sampler but I would also like a video sampler. I have checked the price of sound and video samplers and they seem to be quite expensive. Is there some way of getting both combined into one cartridge?

Graham Haigh, Wirral

A You've just described the VideoMaster cartridge, which combines a sound sampler and video digitiser in a single unit (plus software) and only costs £69.95. Give HiSoft AVR a ring on 0525 718181 to order your VideoMaster.



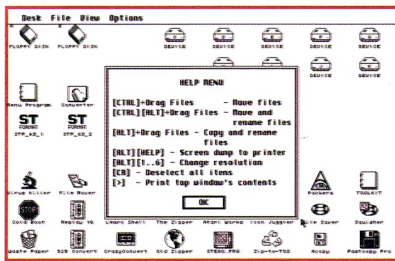
■ We gave you the latest version of the VideoMaster editor software from Cover Disk 59. Did you have this much fun with it?

ROM Drive

My CD player has a couple of extra features in the manual that have made me wonder if I can connect it to my ST and use it as a CD-ROM drive. The text reads "DIG. OUT socket: for future CD applications such as CD-ROM or digital signal processing." I have enclosed a photocopy of the manual. Can I connect it to my ST? (Your manual? – jill)

Reg Atkinson, Southampton

■ The infamous on-line help screen in STS 2.06. What more can we say, except that Clive has since been seriously thrashed.



WeServe of Hampshire Established 9 years

Printers

Canon BJC-600

New Colour Printer £419+VAT
£492.33

360dpi Inkjet printer. Visit our showrooms
compare Canon/Epson/HP/Star

Canon Inks

	Exc VAT	Inc VAT
BJ105x 360dpi	£145	£170.38
BJ200 Inc Sheet Feed	£185	£217.38
BJ230 wide carriage	£285	£334.88
BJ300 360dpi	£389	£386.58
BJ330 wide carriage	£379	£445.33
BJC800 fast & colour	£1115	£1310.13

**All Citizen printers have
a 2 year warranty**

Citizen

	Exc VAT	Inc VAT
1200+ 9pin Mono	£96	£112.80
Swift 90 9pin Mono	£123	£144.57
Swift 90 9pin Colour	£133	£156.87
Swift 200 24pin Mono	£144	£169.02
Swift 200 24pin Colour	£154	£180.95
Swift 240 24pin Mono	£174	£204.45
Swift 240 24pin Colour	£186	£218.55
New Citizen Project II	£179	£210.32
PN48 Portable	£189	£222.08
Notebook 2 Col. Port.	£235	£276.13

New Citizen ABC

A new 24pin Citizen printer
with optional colour

ABC 24pin Mono	£119	£139.82
ABC 24pin Colour	£136	£159.80

Epson

Special Offers

Stylus 800 £184+VAT

360dpi Piezo Inkjet £216.20

Stylus 300 £129+VAT

360dpi Inkjet printer
with sheet feeder £151.58

Epson

	Exc VAT	Inc VAT
LX100 9pin+Sheet Fd	£109	£128.08
LX400 9pin Mono	£94	£110.45
LX850 9pin Mono	£139	£163.33
LQ570+ 24pin Mono	£199	£233.83
Stylus 300 Inkjet	£129	£151.58
Stylus 1000 Inkjet R3	£353	£414.78
EPL5000 6ppm Laser	£439	£515.83
EPL5200 6ppm Laser	£495	£581.03
EPL8100 10ppm Laser	£699	£821.33

Panasonic KXP1123

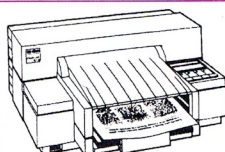
Probably the best 24pin
mono printer available. £118+VAT
£138.65

Panasonic

	Exc VAT	Inc VAT
KXP1170 9pin Mono	£95	£111.63
KXP123C 24pin Colour	£149	£175.07
KXP203 24pin printer	£129	£151.57
KXP2624 24pin printer	£268	£314.90
KXP4400 4ppm LED	£575	£640.63
KXP4410 5ppm Laser	£429	£504.08

Sheet Feeders

	Exc VAT	Inc VAT
Canon BJ10 series	£42	£49.35
Citizen Swift range	£67	£78.73
HP Deskjet 310	£54	£63.45
Star LC range	£51	£59.93
Panasonic KXP range	£72	£84.60



HP Deskjets

	Exc VAT	Inc VAT
300dpi, mono or colour.		
Laser quality print		
Deskjet Portable mono	£165	£193.88
Deskjet 520 mono	£195	£229.13
Deskjet 500C colour	£258	£303.15
Deskjet 560C colour*	£379	£445.33
Deskjet 1200C colour	£1089	£1279.57
Deskjet 310 mono	£179	£210.33
Colour kit for 310	£30	£35.25

520 Mono 300/600dpi

560C Colour 300/600dpi

*560C has Colour & black cartridges
resident at the same time.

All desigjet prices include 3 year warranty

HP 500C Colour Printer

Deskjet 500C

300dpi colour inkjet printer.

£258+VAT £303.15

HP Lasers

	Exc VAT	Inc VAT
Laserjet 4L 4ppm PCL5	£459	£551.08
Laserjet 4P 4ppm PS2	£715	£840.13
Laserjet 4ML 4ppm 4M	£745	£875.38
Laserjet 4MP 6M PS2	£975	£1145.63

Star

	Exc VAT	Inc VAT
LC2420 mk2 24pin	£119	£139.83
LC24100 Mono24pin	£102	£119.85
LC24200 Colour 24pin	£195	£229.13
LC24-30 Colour 24pin	£159	£186.82
LC24-300 Colour 24pin	£191	£224.13
Star SJ48 inkjet	£160	£188.00

Star LC100 £96+VAT

9pin colour £112.80

Star SJ-144

New Colour Printer £285+VAT
£334.88

360dpi thermal (suitable for transfers)

Dust Covers

For Printers, Monitors, Computers
most types in stock from £4.70

Ink Refills

BJ10 twin refill various colours	15.90
Deskjet twin refill various colours	15.90

(We stock 200 types of ribbons)

Printer Packs

A starter pack for all printers consisting of
printer paper and a connection cable costs

only £5 (£5.88 inc VAT)

A stand is an additional £5.00+VAT

WorkCentre

Expansion System

Monitor stand with shelf for drives etc.
Strong metal construction made from
14SUG steel epoxy coated. No Cables
are included.

Special price **£27.50**

Ataris

Falcon

Ataris Counter sales only

16MHz 38bit CPU, 1.44M floppy,

1-14Mram, 8 channel sound

1Mram No Hard Disk £459

4Mram No Hard Disk £639

4Mram 64Mb Hd £789

4Mram 127Mb Hd £829

4Mram 209Mb Hd £919

Atari STE's

with STARTER PACK software

520STE 512k £199

520STE 1M £199

520STE 2M £299

FAMILY CURRICULUM PACK

1040STE 1M £199

1040STE 2M £299

Above 520's are supplied with

STARTER PACK Software:

1stWord, NEOchrome, Ani ST, + 4

GAMES: Missile Command, Crystal

Caves, Battlesnake & Super Breakout.

Add £10 to above for

DISCOVERY XTARI Software

Atari 520 FM

0.5M ram 1M Disk

(FM only model) £139

Upgrades

1/2M Simm £8.50

2M Simm ram upgrade 100.00

NeoDesk 3M ram upgrade 200.00

0.5M Xtra ram Deluxe 39.00

1M Xtra ram Deluxe 130.00

4M Xtra ram Deluxe 239.00

Accessories

Joystick/Mouse twin extension 4.70

4 Player adaptor lead 5.88

Atari ST Printer cable 6.99

Atari ST to ST serial lead 10.95

Mouse Mat (thick soft type) ... 4.95

Mouse House 2.95

We have over 100,000

satisfied customers. Are

you one of them?

Mice

Golden Image Mouse 12.90

Genius Hapoy Mouse 12.90

Manhattan Mouse 13.90

True Mouse 14.90

Mouse/Joystick Autoswitch 12.95

Floppy Drives

Zydec 1M 3.5"

1M external floppy. High quality build.

Very quiet slimline design. **£56.90**

Internal 1M Drive

£47.00

70 page catalogue. All prices include 17.5% VAT unless stated otherwise

EDUCATIONAL AND GOVERNMENT ORDERS WELCOME

All hardware has 30 day money back & 12 month warranty.

Prices are subject to variation without prior notification.

Please phone for express clearance of cheques. Credit AP9 8.8%

Established 9 years. 3 minutes from M27 Junction 11. Free parking.

Open 9 to 5.30 Monday to Friday & 9 to 5 Saturday. Carriage/order.

Post £1.60+VAT £1.88 Securicor £8+VAT £9.40 Air £14+VAT £16.45

Tech. Support 0474000

WeServe

Larger items delivered by Securicor

VISA

Software

Discovery Xtra Pack

1ST Basic, NEOchrome, ST Tour,

+ 4 GAMES: Sim City, 9 Lives, Final

Fight, Robot Monsters

While stocks last **£10**

Special Offers

1st Word Plus £44

TimeWorks 2 £37

Both of above £79

NeoDesk 3 £28.70

Steinberg Pro 24 v3

24 track music system

Record/Playback/edit any midi keyboard

Display & print music. Real time control

While stocks last **£59**

First Basic - HiSoft

The most popular Basic language

package for the ST

While stocks last **£9.90**

Organiser - Triangle

Database / Spreadsheet / Diary

/ Editor for the Atari ST

While stocks last **£9.90**

Atari 520 FM

0.5M ram 1M Disk

(FM only model) £139

Upgrades

1/2M Simm £8.50

2M Simm ram upgrade 100.00

NeoDesk 3M ram upgrade 200.00

0.5M Xtra ram Deluxe 39.00

1M Xtra ram Deluxe 130.00

4M Xtra ram Deluxe 239.00

Accessories

Joystick/Mouse twin extension 4.70

4 Player adaptor lead 5.88

Atari ST Printer cable 6.99

Atari ST to ST serial lead 10.95

Mouse Mat (thick soft type) ... 4.95

Mouse House 2.95

We have over 100,000

satisfied customers. Are

you one of them?

Mice

Golden Image Mouse 12.90

Genius Hapoy Mouse 12.90

Manhattan Mouse 13.90

True Mouse 14.90

Mouse/Joystick Autoswitch 12.95

Floppy Drives

Zydec 1M 3.5"

1M external floppy. High quality build.

Very quiet slimline design. **£56.90**

Internal 1M Drive

£47.00

70 page catalogue. All prices include 17.5% VAT unless stated otherwise

EDUCATIONAL AND GOVERNMENT ORDERS WELCOME

All hardware has 30 day money back & 12 month warranty.

Prices are subject to variation without prior notification.

Please phone for express clearance of cheques. Credit AP9 8.8%

Established 9 years. 3 minutes from M27 Junction 11. Free parking.

Open 9 to 5.30 Monday to Friday & 9 to 5 Saturday. Carriage/order.

Post £1.60+VAT £1.88 Securicor £8+VAT £9.40 Air £14+VAT £16.45

Tech. Support 0474000

WeServe

Larger items delivered by Securicor

VISA

ST/Format Dept.

40-42 West Street

Portchester Hants

PO16 9UU

Tel: 0705 647000

PROGRAMMING STOS CORNER

Frank Charlton steps up to the counter and faces the shop assistant. "Er, a quarter of strawberry STOS routines please" he mumbles, staring at the floor.

It's illegal

I have a 520STE and STOS. Every time I try to load the sprite designer a message appears on the screen saying "Illegal Direct Mode."

Tania Wilson, Leeds

stf: Make sure you load the sprite designer as a STOS Accessory—clear any other Accessories using the command ACCNEW at the interpreter prompt, then use ACCLOAD "SPRITE.ACB" to load the sprite designer. Press <F1> to run the sprite accessory. You can't use the larger sprite banks supplied with the designer on a 520STE because the accessory uses a lot of memory. Never try to load a STOS

accessory from inside your own program—always load it from the interpreter prompt and you should be okay.

Wrong side of the tracks

I am having problems running programs from within STOS. The two most recent I have tried are *Audio Sculpture* and *Quartet*. When I call the program code from within STOS, I get an "Illegal Instruction at line nn" error message—nn being whatever the first line of the BASIC listing is. This is happening even with the *REPLAY.BAS* listing supplied on the *Audio Sculpture* Data Disk. Can you help, because I would like to use *Quartet* music and MOD files in my STOS proggies?

Ade Samm, Luton

stf: Good news and bad news, Ade—the STOS source supplied with *Audio Sculpture* doesn't work. You're not causing the fault, it just seems that the source was never

tested properly before release, because most of the listings supplied for other programming languages also fail to work without a lot of modification. We know it's old and sometimes quirky, but the STOS Tracker Extension from the original STOS authors works well with MOD files using the conversion program supplied. Check your favourite PD Library and pick it up for the price of a disk. As for *Quartet*, you need a program called *STOSPLAY*, available from *Floppypop* PD (☎ 0224 586208)—the disk's catalogue number is MUS 3687.

Unhappy extensions

For some reason any programs I load into STOS containing the command EXTENSION *S produce the error "EXTENSION NOT PRESENT AT LINE n" and stop the program. This also happens when I try to compile the program. Where am I going wrong?

Simon Trundle, Staleybridge

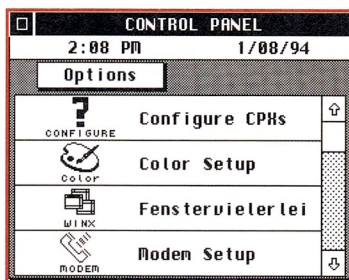
A We nipped around to the CD-ROM Today office and waved your spec sheets at them. After a bit of head scratching and mumbling they were of the opinion that your CD player can't be used as a CD-ROM drive. The DIG. OUT socket on your CD player is only a single connection consisting of a signal conductor and a ground conductor with no provision for any control signals to be passed to the drive. In fact, the digital output from your CD player is designed to be used with DAT recorders with a digital input socket or with music hardware such as Akai sound samplers, and has no connection with CD-ROM.

No self XControl

A I'm having a problem with the XControl Panel Desk Accessory and my hard drive. Every time I try to boot up with XControl enabled on partition C my STE goes into a loop of crashing and re-booting and I have to initialise the hard drive from floppy disk. Is there something wrong with my STE (TOS 1.6) or hard drive? Everything else works okay.

Mick Colman, Basildon

A It sounds as though you either have a Desk Accessory clash or a CPX clash. Disable all your Desk Accessories and Auto folder pro-



■ XControl, one of the few concessions to GEM's maximum of six Desk Accessories. But doesn't it know it? It's a right picky little beast sometimes.

grams except XControl and re-boot your STE. If you still have the problem it may be a CPX clash—some CPXs are designed for the TT and Falcon and won't run on an STE, causing crashes when they load. Make sure you haven't got TTTIME.CPX in your CPX folder, because it's the usual culprit in cases like this. To disable a CPX you need to change the last letter of the file extender to Z

PROGRAMMING ASSEMBLY POINTERS

Tony Wagstaff heads home from his latest concert and tries to work out exactly which version of GDOS is installed in his desk drawer.

Record breaker

I'm writing a program that needs to keep a list of records in alphabetical order in the same way as a database. How do I insert and delete records quickly?

Mark Wright, London SE18

stf: Although the records are kept in order as far as anyone using the program is concerned, they don't need to be stored in memory in any particular order. Instead each record stores the address of the previous record and the next record, except of course the first and last records which use zero as appropriate. This saves having to move a lot of the entries up or down whenever a record is inserted or deleted, which can save an awful lot of time. Instead, all that needs to be done is to update the addresses of the previous and next records. Any resorting can then be done when the user requests it, or maybe when saving the records to disk.

First we need to define our records:

```
rsreset
prev_record rs.1 1
next_record rs.1 1
field1 rs.1 1
field2 rs.w 1
record_end rs.1 0
Alter field1... to match the fields of your records.
```

The following routine will insert a record immediately after

another. A0 should contain the address of the previous record, and a1 the new record:

```
insert_after
move.l next_record(a0),d0
move.l a1,next_record(a0)
move.l a0,prev_record(a1)
move.l d0,next_record(a1)
beq quit_insaft
move.l d0,a0
move.l a1,prev_record(a0)
quit_insaft
rts
```

Next, we need a routine to insert a record before another. Again, A0 contains the address of the existing record, and a1 the new record:

```
insert_before
move.l prev_record(a0),d0
move.l a1,prev_record(a0)
move.l a0,next_record(a1)
move.l d0,prev_record(a1)
beq quit_insbef
move.l d0,a0
move.l a1,next_record(a0)
quit_insbef
rts
```

Finally, a routine to delete a record:

```
delete_record
move.l next_record(a0),a1
move.l prev_record(a0),a0
move.l a1,d0
beq chkpr
```

```
move.l a0,prev_record(a1)
chkpr
move.l a0,d0
beq quit_del
move.l a1,next_record(a0)
quit_del
rts
```

With these simple routines, adding and deleting records is as easy as an easy thing, on an easy day, in Easyto... (Yes, that'll do—Trent)

```
move.l #record2,a0 *insert record2 before
record1
move.l #record1,a1
jsr insert_before

move.l #record2,a0
move.l #record3,a1 *insert record3 after
record2
jsr insert_after

move.l #record2,a0
jsr delete_record

bss
record2 ds.l record_end
even
record3 ds.l record_end
even
record1 ds.l record_end
```

Moving screen

When using the Mon debugger, the screen border often shifts to the left by up to four characters when

stf: Every Extension you add to STOS has its own alphabetical identifier and interpreter, and Compiler Extensions are given the file extenders EX? and EC? respectively, with the ? replaced with the identifying letter. For example, STOS Maestro comes supplied as MAESTRO.EXD and ECD, and the Misty Extension is MISTY.EXM and ECM. No two Extensions can use the same letter, so occasionally when you install a new one, you might find it uses a letter already taken by another one. It's easy to rename the files from the Desktop to an unused letter so STOS recognises them, but if your listing contains the EXTENSION command, you'll get the error you describe. The simple solution is to change all such lines in your code to the new letter – if you'd changed the extension from ECS to ECW, just alter the offending lines to read EXTENSION *W and you'll be away. We suspect that the STOS listings you tried are the original STOS Tracker routines, as they use the file extender ECS and EXS – possibly you or whoever gave you the Extension changed it from ECS? Just change the code, and you'll be okay.

And finally, Esther

Here's a nifty little routine supplied by **Mark Normington** of **Great Yarmouth** to try if you're sick of using the old **APPEAR** command to fade a picture on to the screen. It uses **SCREEN COPY** to copy chunks of your picture on to the physical screen as if it was being poured from the top.

If you find it runs a little fast, you can slow the whole procedure down by adding a **WAIT** command in place of the **REM** statement at line 55. A nice effect.

Mark's written another eight routines in a similar vein, and we'll try to squeeze them in whenever we have space. Cheers, Mark. We'll be sending you, er, hmm... Well, we'll be sending you some, like, really positive vibes.

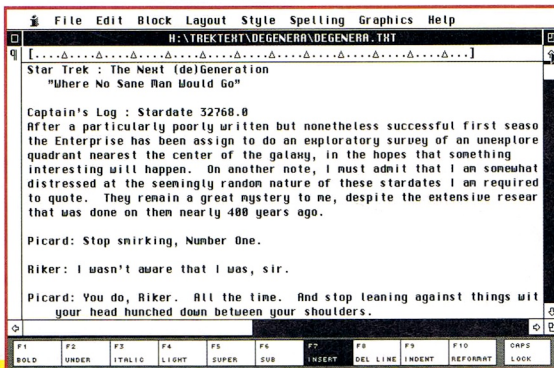
```
10 mode 0 : key off : flash off : hide : curs off : click off
15 cls back : rem The sprite background is cleared & used to grab a blank block for the drop bit
```

```
20 reserve as screen 6 : load "YOURPIC.P11" , 6 :
get palette (6)
25 SCBKX=175 : SCBKX=0 : SCBKD=1
30 rem *** Main loop ***
35 for MLP=1 to 80
40 rem *** Block drop loop **
45 for SCBKSY=-25 to SCBKX step 25
50 screen copy 6, SCBKX, SCBKX, SCBKX+32, SCBKX+25
to logic, SCBKX, SCBKSY : screen copy
back, 0, 0, 32, 25 to logic, SCBKX, SCBKSY-25
55 rem Insert a wait here for a slower drop speed
60 next SCBKSY
65 if SCBKD=1 then SCBKX=SCBKX+32 : if SCBKX=320
then SCBKX=SCBKX-32 : SCBKX=SCBKX-25 : SCBKD=-1
: goto 75
70 if SCBKD=-1 then SCBKX=SCBKX-32 : if SCBKX=-32
then SCBKX=SCBKX+32 : SCBKX=SCBKX-25 : SCBKD=1
75 next MLP
```

instead of X. You can also crash your STE or STFM by changing resolution between medium and low with XControl installed, although it's safe to do this if you have TOS 2.06 installed.

Colour drivers

I want to use Protex 6, 1st Word Plus and other text-based software with my Panasonic KX-P2123 and colour kit. How can I get these programs to work correctly?
Samuel Davis, Milton Keynes



A Printing in colour correctly with word processors depends on the printer drivers supplied with the software. Your KX-P2123 has an Epson emulation mode, so just select colour Epson printer drivers from your programs until you find one that works correctly. You should have no problems with Protex 6 but older programs like 1st Word Plus probably won't have colour drivers – you'll have to live with mono output in some cases.

■ Clive demonstrates 1st Word Plus' usefulness for typing up alternative Star Trek scripts. He'll have trouble printing them in colour, though.

switching between Mon's screen and the output program. Is this a hardware fault with my machine?
Jim Beard, Halifax

stf: Some clocks that display the time on the menu bar can cause this problem with programs that have two screens. Degas is another casualty. Try removing all Desk Accessories, Auto programs and any other memory-resident programs – it's probably one of these causing the problem rather than your machine.

Speedo

I'd like to try some of the new VDI calls for SpeedoGDOS in assembly? How do I check if it's loaded?
Marvin Grange, Southampton

To use the new features, you need to check first what version of GDOS is present, using the `vg_gdos` call

```
move.l #2,d0
trap #2
```

D0 now contains one of the values in the Which GDOS boxout. To differentiate between Speedo and FSM one further check needs to be made: the FSMC cookie

```
move.l #FSMC,d3
lea p_value,a4
jar getcookie

bss
p_value: .fill 1

text
```

```
getcookie
*on entry
*a5=address to return cookie value, or 0 if not needed
*d3=target cookie

*returns
*d0 = 0 not found, 1 found
*d4 = number in jar if found
```

```
move.l #1,-(a7)
move.w #20,-(a7)
trap #1
addq.l #6,a7
tst.l d0
bne.s .user
clr.l -(a7)
move.w #20,-(a7)
trap #1
addq.w #6,a7
movea.l d0,a3
bra.s .super
user suba.l a3,a3
super movea.w #52a0,a0
movea.l (a0),a4
move.l a3,d0
beq.s .nossp
move.l a3,-(a7)
moveq #20,d0
move.w d0,-(a7)
trap #1
addq.w #6,a7
.nossp clr.l d4
move.l a4,d0
beq.s .return_zero
.try_next
```

```
move.l (a4),d0
cmp.l d3,d0
bne.s .not_ours
move.l a5,d0
beq.s .no_p_value
move.l 4(a4),(a5)
.no_p_value
moveq #1,d0
bra.s .return_one
.not_ours
addq.l #1,d4
movea.l a4,a0
addq.w #8,a4
tst.l (a0)
bne.s .try_next
.return_zero
moveq #0,d0
.return_one
rts
```

If the address in (a5) contains 'SPD' then Speedo is installed.

Which GDOS?

Check these values to determine which version of GDOS is running.

Value in d0...	Version...
-2	No GDOS
Any Other	GDOS v 1.x
\$5f464e54 'FNT'	FONTGDOS
\$5f46534d 'FSM'	FSM or Speedo

CONFIGURE IT OUT

Make Papyrus Gold your own. Nick Peers shows you how to set it up exactly as you want it.

One of the beauties of Papyrus Gold, the new document processor which scores 91% on page 46, is the extent to which you can set it up exactly to your personal tastes. Read on for a demonstration of how the main aspects of the pro-

Options menu, or alternatively press <Ctrl>,<Shift> and <E> at the same time.

Let's go

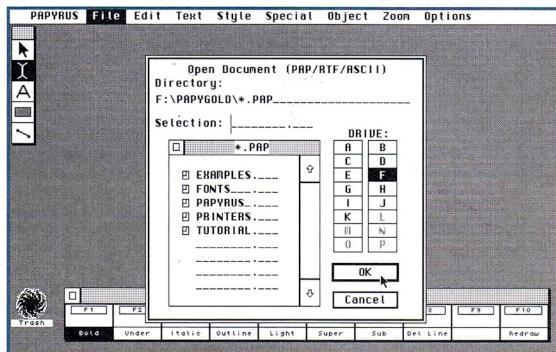
Firstly, you can set file paths for loading/saving documents, and importing/exporting text and graphics. When you open your first document, or import your first picture or text-file, the file paths are altered using your ST's own file selector. If you then 'Save options', the file paths are stored, saving you time and hassle next time you access your files. There are separate file paths for loading and saving documents, and for importing and exporting text and graphics, meaning that you can keep your documents in one folder, and your pictures and ASCII files in another (nice tidy filing).

To set the paths for your bitmapped fonts (that is, GEM and Signum12 fonts), select the appropriate option from the Options menu and you're presented with a dialog box containing five font paths. Configuring them is easy –

■ Someone is caught surreptitiously trying to alter their font paths. Over here officer!

gram – fonts, dialog boxes and file paths – can be configured.

Once you've set Papyrus up exactly as you want it, make sure you don't lose your changes. Update the PAPYRUS.INF file regularly – it loads your preferences in with Papyrus, and updating it regularly simply spares you from having to make all your changes again. Select 'Save options' from the



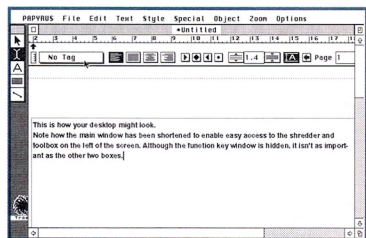
■ Whenever Papyrus boots, it presents you with the file selector. Here, you can see it has been configured to Nick's highly organised requirements.

just click on the path you want to change, and the file selector pops up, from which you can easily select your font path. This certainly beats the old TOS 1.2 method of typing in a fiddly command line.

SpeedoGDOS font paths, however, can't be altered in this way, because their configuration is set from within the SpeedoGDOS Outline Program.

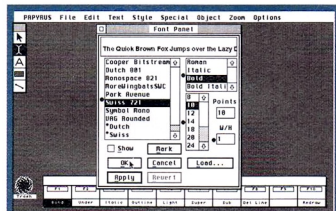
You can also save time by configuring the desktop to your needs. In a perfect world you could fill the whole work area with your document, but this would cover up the

Toolbox, Shredder and Function key icons. When you create a new document or open an existing one,

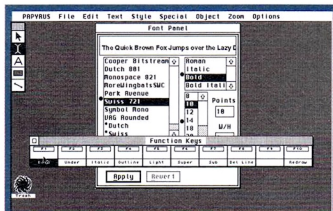


■ That's a good idea. Put all the information on to the picture itself, leaving space underneath to write a witty but meaningless caption instead. Oh dear, run out of space.

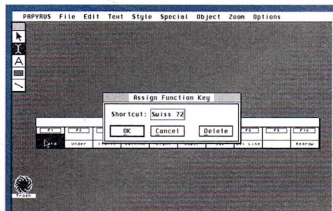
ASSIGNING FONTS TO FUNCTION KEYS



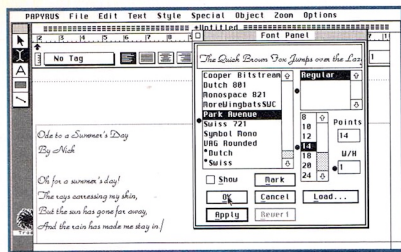
1 First, open the Font Panel dialog box from the Text menu. An alternative way of doing this is to hold down <Ctrl> and <Z> together. From here, select the font, its size and (where applicable) the style you wish to assign to the Function key. Here we've picked a bold style from the Swiss font family.



2 Next, open the Function Key box by clicking on it, or selecting 'Function Keys...' from the Style menu. Then hold down <Ctrl> and click on the blank panel beneath the Function key to which the font is to be assigned. This will open the Assign Function Key box.

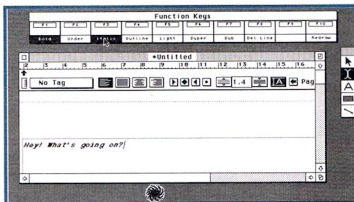


3 You can now assign the font to the Function key selected. The name given in the Shortcut box matches the name of the font, but can be reconfigured as you wish. Delete enables you to remove whatever default setting previously existed, returning the Function key to its original setting.



■ If you make a habit of writing drivel like this, hide it behind a nice flowery font like Park Avenue. It's virtually unreadable.

you might want to sacrifice some window space to enable easier and quicker access to these options. Select 'New document' from the File menu, and the screen fills with the main window, in which your future documents are displayed in all their glory. Like any window it can be resized and reshaped, exposing any or all of the other



■ Nick's slightly bizarre desktop, from which the Papyrus logo has been removed. Blasphemy.

elements as column numbers, margins and even the size and shape of the paper itself.

Those options keep coming

One of Papyrus' most impressive features lies in its use of dialog boxes, which enable you to configure your setup quickly and painlessly. There are too many to cover here, but a few of the more widely used will serve as a demonstration of how the others work, leaving you to further explore the program in your own time.

You can also change all the default font settings and families in the Font Panel box (accessed from the Text menu), then just save the new configuration. Even more impressive is the facility to assign fonts and styles to the Function

keys – you can configure all ten to default to your preferred selections. Open the Function Key box from the Style menu. While holding down <Ctrl>, click on the middle panel below the Function key number you wish to alter within the box, and another box opens, giving you the option to assign your chosen attributes to the Function key and enter a name for future reference. Again, don't forget to save your options when you've finished.

For example, you can easily configure the layout of your document and save it as a default setting, which is particularly useful if you use Papyrus for, say, creating a weekly newsletter that requires precise settings. Select either 'Page Layout' or 'Paper Format' from the File menu and you can change such

And coming...

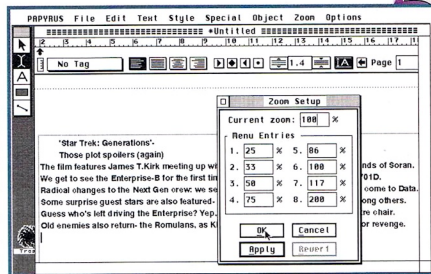
Accessing the Zoom menu gives you eight default zoom options, or you can zoom in at a different figure to those available from the main menu, and also change the default settings.

Many of Papyrus' configurable options lie within the Options menu (no, really). Most of these, such as the 'Screen Display' and 'Import/Export' options are self-explanatory, but others deserve more explanation.

The Spellchecker box can either be permanently installed, checking your copy against its dictionary every time you type anything in, or you can make it passive, activating it from the dialog box when required. You can also highlight certain text (such as a program listing, or a passage in a foreign language) that you might want to exempt from the spell-check.

Nearly there now

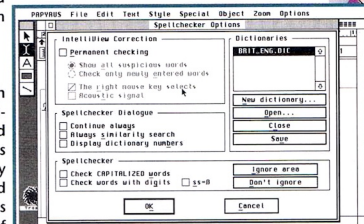
'Miscellaneous' deals with options that would sit uncomfortably elsewhere, and includes such useful ditties as the option to automatically save your text at pre-defined intervals or to create backups of all your saved documents. If your system configurations change rapidly, you can select an option that automatically saves the current settings when you quit Papyrus. Even more useful is the 'Save work environment with settings' option, which enables you to restart Papyrus with whatever documents, windows and dialog boxes were open when you last quit the program, enabling you to pick up exactly where you last left off.



■ Foiled again! I would have got away with it if it weren't for you kids and your Zoom Setup dialog box. (Is this some kind of running Star Trek gag? - Ed)

Two more options deserve attention. The first enables you to configure how much memory the program uses (default setting 1.5MBytes), freeing up the rest of the memory to be used as cache for printing, Accessories and SpeedoDOS fonts, all of which speed up the program even more.

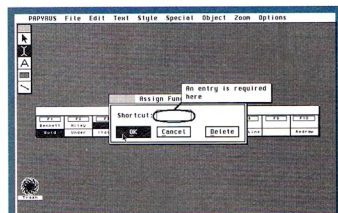
Finally, no document processor would be complete without the ability to configure printer settings



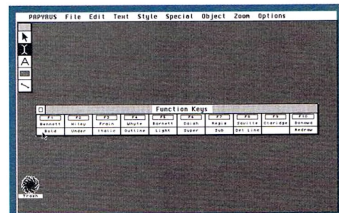
■ Wiv a Spellchecker like this there's no excuse fore shoddy spelling. (V. poor gag.)

to match your printer setup. Papyrus supports 18 printer drivers as well as enabling you to create your own (for example, Papyrus doesn't have default settings for the Canon BJ range of printers, but you can create them yourself).

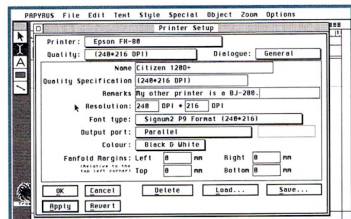
There are, of course, many other settings and defaults you can change, making Papyrus Gold one of the most user friendly programs you're likely to find for your ST. So go and buy it now. And don't think I won't notice if you don't, because I will. **stf**



4 Papyrus checks that you have made an entry in certain boxes. Here, it highlights a box that requires an entry before you can proceed. This check is also performed elsewhere within the program, such as in the Spellchecker and Index Entry dialog boxes.



5 When you've finished assigning all your function keys you should be greeted with a box like this one. However, the point is not to name all your Function keys after Birmingham City football players. Manchester United players, perhaps, but Birmingham City... well, really.



■ Cue tacky sticker: 'My other printer's an Atari LaserWriter.' Yeah, right.

READER

**YES! BECAUSE YOU
DEMANDED IT!**

ADS

**Want a copy of a
deleted game?**

**Do you want to sell
a piece of ST kit?**

**Need to leave a
message for other
ST owners?**

**Tell the world about
your User Group!**

**ST FORMAT is now
offering a reader ad
service - and it's
totally FREE. To BUY,
SELL, SWAP or SAY
anything all you have
to do is just fill in the
form below.**

**Because your
ad will be seen by
thousands of dedicated
ST users every month
you're sure of a
massive response. So
go on, give it a shot!**

WANTED

■ Free reader ad in the next possible
issue of *ST FORMAT*. I want this ad to
be seen by thousands of ST owners all
over the United Kingdom.
☎ 0225 442244 and ask for Trenton.

ST FORMAT READER AD ORDER FORM

Name:

Address:

Postcode:

Telephone (inc STD):

Write your ad in block capitals (maximum 30 words) in the space
provided. Then either cut out the coupon or use a photocopy and
send it in to: *ST FORMAT* Reader Ads, 30 Monmouth Street, Bath,
Avon, BA1 2BW.

.....
.....
.....
.....
.....

Classification (please tick)

Sales ☐ Wanted ☐ Swap ☐ Messages ☐ User groups ☐

Terms

ST FORMAT Reader Ads are accepted on the
following conditions:

- 1) No trade/commercial ads
- 2) The accuracy, position and timing of the ads
cannot be guaranteed.
- 3) Anyone found using the *ST FORMAT* Reader Ad
service to sell pirated software will be reported to the
appropriate authorities.
- 4) We will only print your ad if you sign below. So
please don't forget.

I agree to abide by the conditions stated above.

Signed

Date

GAMEBUSTERS

Apparently cheats never prosper, So don't read this section – it's for poor people.

F-19 STEALTH FIGHTER

REVIEWED: STF 12, 96%

This month's journey into the intricacies of F-19 starts in Burton-on-Trent, with one Benjamin Boucher-Giles. There aren't many short cuts to take in the game, so what you really need now is a playing tip or two.

Medals and Promotion

At the beginning of your carrier it is easy to get good medals and quick promotions. Therefore, you should only start a carrier when you're capable of getting 950 points or more, because after 25 missions or so 1,000 points will only get you an Airman's medal.

missions – ground installations are worth more.

Opponents: in 'conventional war' mode it's almost as easy to fly against elite opponents as it is to fly against veterans. Neither is hard to kill, needing only one missile, though they might dodge a missile fired from less than 10km head-on.

Briefing: stick to short missions with a fuel consumption of under 9,000lbs, or you'll need to carry extra fuel, which wastes vital missile space. Make a note of the number of radars you fly near – this will determine the armament you'll need. Always try to avoid long missions, photographic missions, air

drops, or anything involving special equipment.

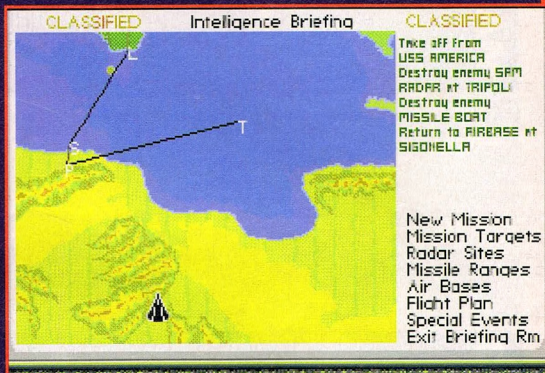
Arming: take three bays of Maverick missiles and one bay of Sidewinders. Use one bay of Mavericks to take out primary and secondary targets (although you should first check that's okay) and the other two bays for radars, leaving the Sidewinders for anyone who tries to stop you.

Flying

Before you take off, you should adjust your cockpit. First switch to detail level one, and switch the head-up display (HUD) to 'air-to-air'. Next select the bay of Sidewinders and extend the flaps.

After take-off (at about 200 feet) switch to autopilot, put up the undercarriage and take your thrust down to 80 per cent, then switch to accel, using <Shift> and <Z>. Never do long hauls on 100 per cent thrust – it wastes fuel and increases your radar visibility.

A2A dogfights: at close quarters use a tactical display. If the plane is



■ Your mission briefing: fly over there, kill wads of people then fly back again. Always remember that you have nothing to fear but the ground.

more than 20km from any others use the cannon to take it out. If the plane's in a group, destroy all but one of that group with missiles and cannon the remaining one. Don't worry about scissors or yo-yo turns – the enemies don't usually fire.

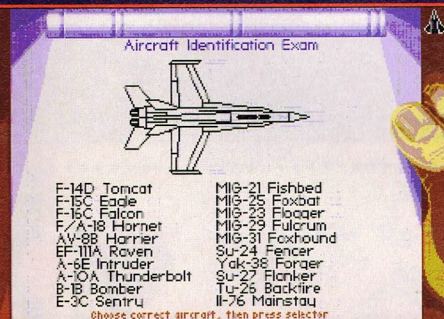
A2G tactics: take out any radars with Mavericks as early as possible, otherwise you'll be crowded out with enemy planes throughout your mission. You can destroy airbases, towers and enemy planes on runways with guns.

A2G with a cannon: when attacking ground installations, don't shoot until you're less than 6km away. Tanks, mobile SAMs and airbases are the easiest to hit, but

stationary SAMs (around radars) can also be taken if you're careful – before you reach the 6km range, try to ensure you're at least at 5,000 feet (so you don't crash). Next, drop your acceleration, put on the airbrake, extend the flaps and reduce the thrust. You should now find that you can 'walk' your fire on to the target (by moving the row of orange dots). Fire in short bursts, to save ammunition.

Landing: when you're 75km from your target, move the plane around to 270° and switch to a tactical display, flying slowly until you're parallel with the airbase. Drop your acceleration and turn toward the base, your waypoint marker now

reading either 000° or 180°. Turn on the ILS, reduce your thrust to about 60 per cent, extend the flaps and line up the ILS. When you're 60km from the airbase, extend your undercarriage and when you reach 1km turn on the airbrake and kill the engine. If you're too high, fly past, circle, and try again.



■ Sorry, but no one calls a plane the MIG-21 Fishbed. Come to think of it, would you fly a mission in a Tu-26 Backfire? What happened to MIG-24 Greatbigplane?

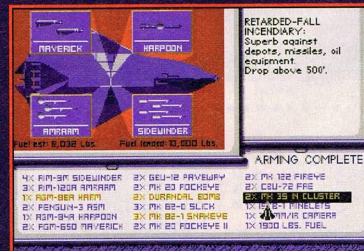
The setup

To gain maximum points you need to fly at risk level ten. This means that if you destroy ten aircraft and six ground installations you will get around 1,300 points. The setup is very important:

Area: try to fly in either the North Cape or Central Europe – these have the most ground installations for you to destroy.

Type: only fight a 'conventional war' (or occasionally a 'limited war') – these don't restrict the destruction of military units.

Mission: make sure you use strike



■ Tooling up your plane is always fun, but be careful not to waste space with the wrong weaponry.



ROCK 'N' ROLL CLAMS

REVIEWED: STF 59, 72%

This month's *Gamebusters* sees the start in a series of complete level solutions for *Caspian's* recent watery adventure. All you need to sail through the game with total ease will be printed over the next two months, thanks to the (cue uplifting

music) hard work and dedication of those wonderful, wonderful people at *Caspian* (a proud mother sobs). Thanks, guys. No, we really mean it - we couldn't have done it without you. Thanks (music stops, cardboard podium falling down).

You think you can wipe out the opposition in *Cannon Fodder*? Score max points in *Elite 2*? Get around the intricacies of *Herman*? Or do you have hot tips on any other ST games? Send 'em in to: *Gamebusters*, ST FORMAT, 30 Monmouth Street, Bath, Avon BA1 2BW. You could even win some cash.

MAP 4
cont

Mines!

MAP 4

Start

Collect tapes

MAP 3
cont

MAP 3

Start

Crabs!

MAP 2
cont

MAP 2

Start

Crash hat - collect for use later

Crab!

Restart block

Avoid starfish

Crab!

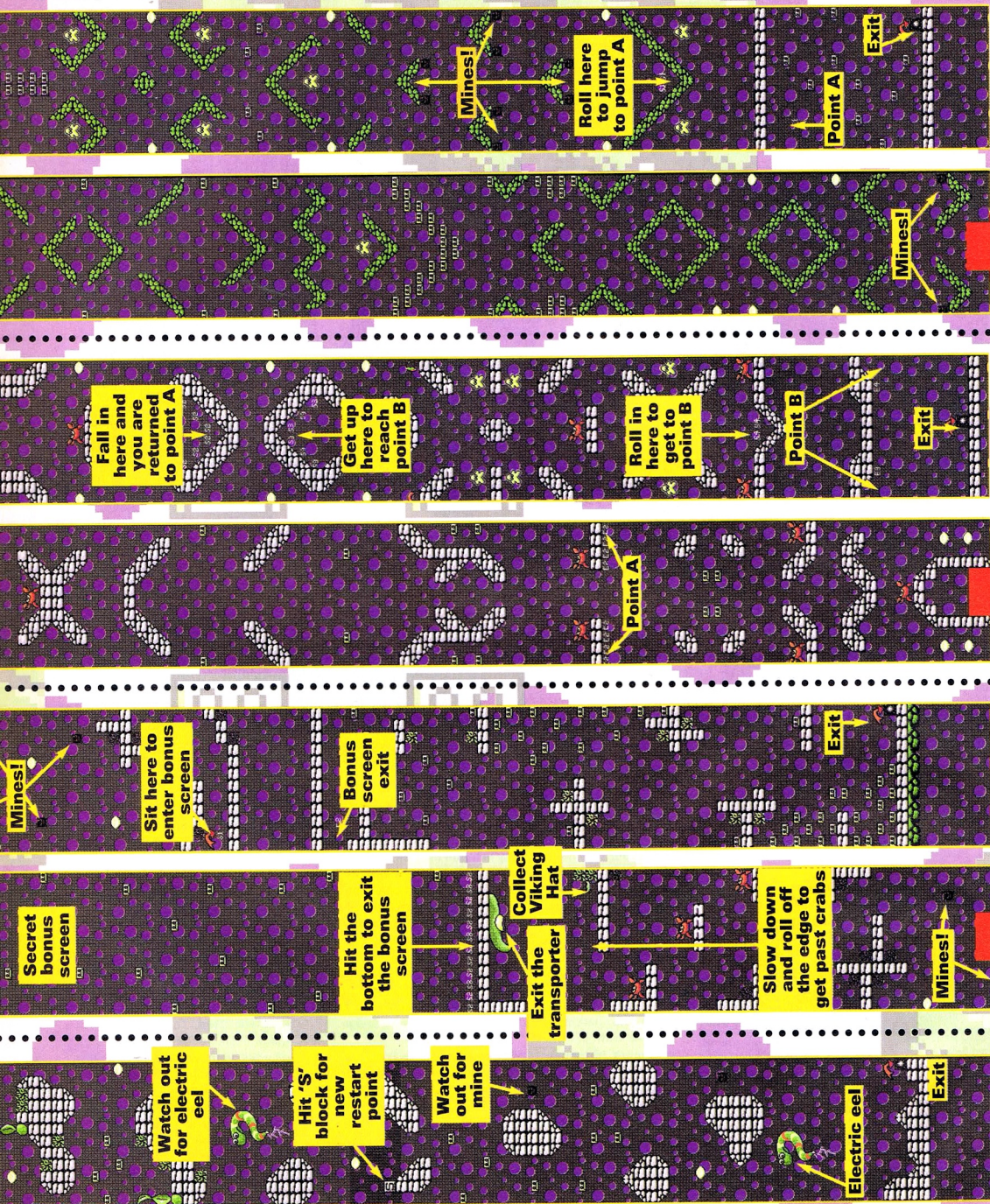
Enter transporter by sitting here and pulling down

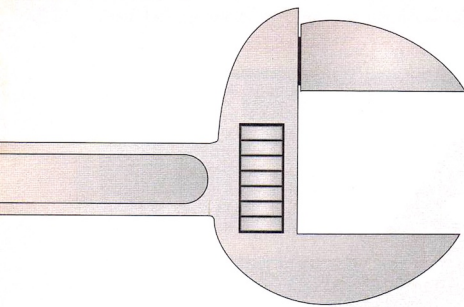
MAP 1

Start

Pick up coins for extra points

Hit 'S' block to restart from here if you get zapped



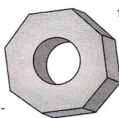


(NEARLY) ALL MY OWN WORK

**Some of us aren't aliens.
Some of us don't want to sift
through thousands of lines of
C+. Simon Forrester's found a
way to get other people to do
all of that stuff.**

You know how it is. Computer buffs sit around telling you that you should be writing games in some of the most contrived languages ever created. You start with BASIC, which is okay, but by the time you get to things like C++ things get just a little complicated. If you really can't be doing with tying your head in knots over collision detection, sprite planes and fast fills, then you probably need a construction kit.

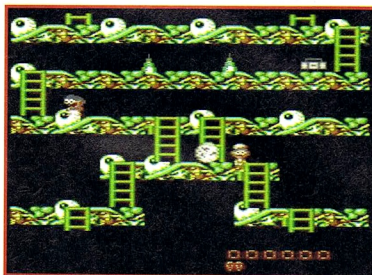
The philosophy of the construction kit is simple. If you want



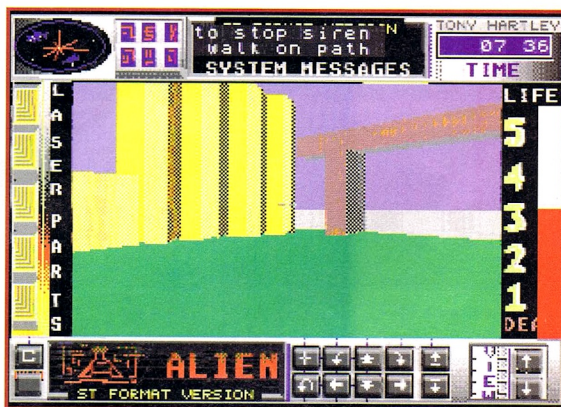
to write a shoot-'em-up, you're bound to write a far better game if you concentrate on gameplay and originality, leaving someone else to write the detailed technical stuff.

SEUCK, a shoot-'em-up construction kit (the, in fact) enables you to design your enemies and their movements, dictate how the player moves, create bosses and special items, and generally do everything you'd want to do in your very own game. You get the fun part, without any of the donkey work (not that there are many donkeys capable of programming in C++).

In fact, construction kits started out with *SEUCK* and carried on from there. As soon as people realised the potential of a game with an infinite number of gameplay possibilities, no one was too inexperienced to knock up their own version of an old classic. Though arriving after simple level designers, construction kits still found



■ Contrary to popular belief, *SEUCK* can be used for all sorts of games, even platformers.



■ It's a 3DCK game - a complete 3D environment to build and explore, requiring all the technical programming knowledge of a squidged snail.

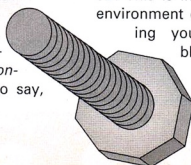
their niche, appealing to the technically illiterate masses as a way into game creation. You might see construction kits as defeating the object a little, but which would you prefer - a brand new, freshly programmed, but unexciting game, or an enjoyable, playable, slightly unoriginal one? Jeff Minter isn't famous for programming, but instead bases his reputation on his excellent gameplay and design.

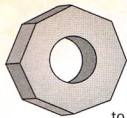
3D Construction Kit

Shortly after the success of Incentive's *Freescape* series (starting with *Driller*, *Dark Side* and *Total Eclipse*) the company decided to tidy up and release their 3D environment editor, the *3D Construction Kit*. Needless to say,

the prospect of designing fun new 3D games led to high sales of the package, and the video tutorial helped everyone take the package for a test drive.

3DCK comes in two distinct parts: the environment editor and a mini-language designed to enable you to interact with objects, and set up attributes, puzzles and anything else in the game that doesn't just sit there, dead. To create a *3DCK* game, then, you need a rough idea of what your world will look like before you start, and an understanding of how objects move in 3D. This is important because the environment editor involves building your world block by block, shuffling things around until they look and play right.





Then, of course, you have to learn the mini-language, which is used to paste conditions on to those blocks. *3DCK* is simple to use in this respect, requiring little experience. With a few simple commands you can create levels, switches, vanishing bridges, all sorts of energy-giving objects, guns, and anything else you might want in your 3D game.

Your end product is a stand-alone game, compiled by *3DCK* but requiring no parts of the original *3DCK* package to run, and which you can freely distribute.

The only real problem *3DCK* faces is speed. Processing full, filled 3D is not easy, and definitely not fast. The original *Freescape* games didn't suffer too many speed problems because they were simplistically designed. As a budding *3DCK*er you're going to want to sit down and create towering structures of girders, platforms and steps. The original *Freescape* authors, however, realised that this kind of design meant an infuriatingly slow game.

Design tips

- Don't make your rooms too complicated. The more objects you put in any one place, the longer the view takes to calculate and display. The player will also find themselves moving at massively varying speeds, depending on how crowded or empty the areas are through which they're travelling.
- Don't make the player move any

great distance under fire. *3DCK* isn't fast enough for people to move instinctively, and by the time they've sussed out where they're going, what they're supposed to be doing and, sometimes, which way they're facing, they're dead.

■ *3DCK* games always suffer from perspective problems. Whereas in

real life you can sense that an object is larger and further away by various depth cues, such as shade, solidity of image and the parallax from eye to eye, in a *Freescape* game, you don't get

these cues. Which makes it the perfect occasion for a few perspective tricks. Don't do them, however – they'll ruin your game.

MAGE Game Creator

The *MAGE* system takes a wholly different approach to game creation, being a set of extensions to *GFA Basic*, handling all the functions and actions needed to create an arcade game that *Basic* previously fell short on.



■ The simple alien massacre game, created with *GFA Basic* and *MAGE*.

Game plots

The next important thing you have to consider, once you've determined what type of game you're going to write and what you're going to use to write it, is a plot.

If you can create an interesting and involving story line at the beginning, you can really hook your player into what they're doing. The other important point about plotting is that if you've got your wits about you, then you can include game features that tie in closely with the story line. You don't have to follow the thing too closely, but even a shoot-'em-up can feature bad guys, background features or power-ups that tie in vaguely with the story line. It may not add anything to your game

immediately, but people have an attention span of about 20 minutes, and you need some way of reviving their will to play any further, perhaps by throwing in the odd twist.

Plotting tips

- Make sure there's a definite purpose for the outing. If the player doesn't have a strong reason to continue, they won't.
- Don't use the 'one man against the entire dark fleet' angle. It's horrible.
- Always save a few surprises. If you can shock the player by turning the game on its head, so much the better – they'll keep playing that much longer.
- Avoid names that end in 'os', 'ax' or 'ar'. This means you can forget *Duros* travelling to the gates of *Domar* to retrieve the sword of *Lothax*.

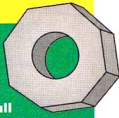
Miracles, and not expecting them

Some people are disappointed with their construction kits. They assume they'll never have to do any hard work again, which is horribly untrue. The point is, whether you're using *SEUCK*, *STAC*, *3DCK* or any other kit, you'll still find you need skills that take a while to master. You're not going to create the best shoot-'em-up ever on your first attempt.

Whichever kit you're using, the secret is practice. Your first kit game will undoubtedly be utter drivel – you'll have relied on the bog-standard features of the kit you're using. The real fun comes

as you slowly get more and more familiar with the package you're using, and start exploring it to its full potential. This isn't something to be rushed, though – you need to produce some tosh simply to get used to the way you work and the way the package works with you.

The moral of this passage is to take it easy. Knock together a few rough games, and when you feel comfortable with the system, start bending the rules and pushing the kit to its limits.



The package consists of a set of extensions as well as the original *GFA Basic*, which means that you only need a working knowledge of the language, and *MAGE* fills in the gaps, providing sprites, collision detection, sonics, and much more. The problems arise if you're not yet familiar with *GFA Basic*. This is not so much a construction kit as an extension to an existing language, so unless you're a fairly competent

GFA programmer, you'll have a lot of hard work ahead of you.

Life isn't all bad, though. *Basic*, like most other languages, is versatile and friendly, making it powerful in a different way. Just as a top programmer has the world as their oyster as far as game design goes, *MAGE* works with *GFA*

to give you many different possibilities in game design – the package isn't rigidly designed to create any one type of game; the possibilities are endless as to what type of game you can produce. Although, using packages like *SEUCK*, the novice programmer can doubtless produce a much better shoot-'em-

up. *GFA* and *MAGE* enable more advanced programmers to add touches to their games that the creators of *SEUCK* didn't dream of including. This is simply the advantage of using a language as opposed to a construction kit, although *MAGE* doesn't really count as a language, being designed purely for creating arcade games.

Design tips

- Find a balance between points and progress. This means avoiding loopholes in which the player can die and yet still accumulate more points than someone who survives intact.
- Don't expect your player to be an accurate shot. You may well be able to time your game down to the nanosecond, but that's because you wrote it – your player still won't get every shot down unless he really practises.
- Always keep the same angle of play. If you start with an overhead view, make sure everything is viewed from overhead. If you shift perspective when drawing some of the sprites your game ends up looking horrible. Don't do it.

Shoot-'em-up Construction Kit

Sensible Software's scrolling shoot-'em-up designer is the obvious choice for anyone wanting to churn out fast, advanced games for others to play. The package enables you to design sprites, define their paths, set backgrounds, add weapons, include bosses, and throw in just about anything else you've ever seen in an arcade.

The problems come when you realise that, no matter what



■ *SEUCK* enables you to create hundreds of games. Er, hundreds of game. (Sophisticated joke that.)



-- MAIN MENU --

XZ-10770737IGT0000

ENTER Enter adventure

Please choose one of the above.

“Even if you’re a complete novice, *SEUCK* enables you to produce a game your friends will “wow” at”

a major problem with originality. One 3D game looks very much like another, and there are enough identical *SEUCK* games out there to get on anyone's nerves. Where text adventure games excel is in their individuality – it'd be hard to accidentally produce something too close to an existing game, as your only limitations are the English language and your imagination. You don't

■ Keep your descriptions consistent. The easiest way to spot a red herring is by its sparse, dismissive description. Conversely, don't put too much emphasis on irrelevant material. Your game will play much better if everything receives the same level of description.

■ **Make sure your backgrounds don't stand out** – if your player spends their time ducking and weaving around things that can't hurt them and careering into other things that looked as if they were just background, they'll hate you.

Construction kits are like shallow waters: you haven't been thrown in at the deep end, so you can't drown. You can, however, take the opportunity to practise swimming, and soon you'll go to the deep end because you're bored of the doggie paddle. Everybody got that? (Great analogy, eh.)

TUMBLEVANE PDL

(Dept 1), 6 West Road, Emsworth, Hampshire PO10 7JT
Telephone: Emsworth (0243) 376000

GAMES & ADVENTURES

GM 101: Psycho Pig 2 (2 disks)
GM 111: The Glass Butler of Tharg
GM 114: Course Angler
GM 119: Insectoid
GM 097: Fatalismat
GM 124: The Klingon War (Star Trek™)
GM 133: Snaccan (Pacman clone)
ADV 009: PORK 2
ADV 032: Christian Adventure
ADV 038: Darkness is Forever

GM 109: Colour Clash
GM 112: Rebound
GM 115: The Obscure Naturalist
GM 120: Brainadame
GM 027: Monopoly
GM 132: Quest for knowledge

ADV 028: A Night on the Town
ADV 035: Deena
ADV 052: Heavy Bunch/Investigation

MUSIC AND MIDI

MUM 26: Alchemie Jr. Sequencer + 200 tracks
MUM 53: Kawai K1 co-2, Hi-res, 1 Mb
MUM 55: Yamaha SY22 Editor, Hi-res, 1 Mb
MUM 56: Guitar Professional, learn those chords
MUM 58: Roland 'D' series Sound Banks

ART AND GRAPHICS

AAG 29: Paintpot, best half meg package
AAG 31: Metahle Format Objects
AAG 35: Creative Titles, Video Tiler
AAG 39: Atari Image Manager V1.96, 2 disks
AAG 38: Crackart V1.36 Full English Manual 1Mb

EDUCATIONAL

EAC 011: Maths Test for the under 10s
EAC 02: Body Search, Basic Human Anatomy
EAC 20: Teltale chemistry, GCSE Levels A, B, C
EAC 21: CA World Football info over 240 countries, 4 disks
EAC 29: Workout. A learning aid

EAC 011: Maths Made Easy
EAC 018: The World (Quiz)
EAC 019: Planetarium
EAC 006: Shipwreck (Maths Cartoon)
EAC 009: Chunnel (French/English)

WORD PROCESSING & DTP

WPD 01: ST Writer Elite
WPD 19: Printing Press
WPD 23: DB Writer

UTILITIES

UTA 28: Award Maker, now with 286 listed awards
UTA 34: DB Master, create your own certificates
UTA 38: 5 Databases, one has got to do the job
UTA 51: 70,000 word spell checker
UTA 53: German Translate, 27,000 words
UTA 048: Sogropan Virus Killer
UTA 057: Ashbank (Personal accounts)
UTA001: Hitchhikers Ullis with Dock Displayer 3

Please pay by cheque or postal order only, payable to: Tumblevane PDL.

Latest Update May 94

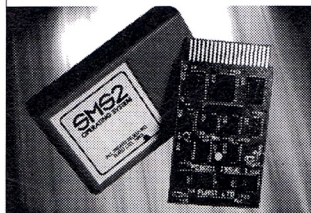
Catalogue with FREE PD £1.00 or 50p with order
Disk prices: £1-75 each. Postage included

TRUE MULTITASKING - THE SMS2 OPERATING SYSTEM

THE DAWN OF A NEW ERA

**SMS2 IS A POWERFUL
OBJECT-ORIENTED, OPERATING SYSTEM
WITH BUILT-IN GUI, HOTKEY SYSTEM
AND NETWORKING. SMS2 TRANSFORMS
EVEN MODEST ST'S INTO REAL-TIME
SYSTEMS WITH
WORKSTATION CAPABILITIES**

But what does this all mean to the user? It means that you can use your computer in the way that YOU want to use it rather than in the way that it forces you to use it. Suppose that you want to use your ST as a fax machine. If a fax call comes in, you are still able to carry on using your word-processor and/or database and/or spreadsheet program. The fax is simply received in the background.



For the programmer, this provides endless possibilities. You can be running your program under development at the same time as editing the source code at the same time as re-compiling a later version. SMS2 is a wonderful environment to work in.

SMS2 comes on a plug-in cartridge for the ROM port of all the ST range and supports the high-res mono mode. There is no complex setting up or installation. You just plug it in, switch on and 9 seconds later you have an SMS2 system



SMS2 is ready now for only **£135.00** by cheque or eurocheque from:

Furst Ltd, Delta House, Garfield Road,
Bishops Waltham, Southampton
SO3 1AT, England.

Telephone: + (0)489 894674

Facsimile: + (0)489 895765

which is ready to network without any expensive hardware add-on's. The system comes in PEROM form on the cartridge so if you want to change the startup configuration at all then it is simple to do this. This also means that any enhancements to SMS2 can be provided on disc without the need to return the SMS2 cartridge.

It must be pointed out that SMS2 does not run GEM or TOS programs. It is a distinct and separate operating system which provides a powerful and yet flexible form of computing. There are already a number of commercial programs and a good range of PD software which is available now and is SMS2 compatible.

WIZARD GAMES

1 NORTH MARINE ROAD, SCARBOROUGH, NORTH YORKSHIRE YO12 7EY TEL: 0793 376586

FROM WIZARD GAMES

3D CONSTRUCTION KIT.....	9.99	LURE OF THE TEMPTRESS (1 MEG) 12.99	SUN CROSSWORDS.....	6.99
ALCATRAZ.....	8.99	MT TANK PLATOON.....	SUPREMACY.....	10.99
ADAM'S FAMILY.....	7.99	MATCH OF THE DAY.....	SWITCHBLADE 2.....	4.99
BULLY'S SPORTING DARTS.....	6.99	MCDONALD LAND.....	TERMINATOR 2.....	6.99
CJ'S ELEPHANT ANTS.....	5.99	MULTI PLAYER SOCCER MANAGER.....	THE GAMES (1 MEG) VS THE.....	10.99
CIN IN THE USA.....	5.99	ANGEL MANAGER.....	THE SIMPSON.....	5.99
CRYSTAL KINGDOM DIZZY.....	6.99	PACIFIC ISLANDS.....	MUTANTS.....	5.99
DAILY DOUBLE HORSE RACING.....	4.99	PANG.....	THUNDERBOLT.....	5.99
DIZZY PANIC.....	4.99	PARASOL STARS.....	TIMES CROSSWORDS.....	6.99
DIZZY PANIC.....	4.99	PICKNICKY.....	TRIVIAL PURSUIT.....	7.99
DUCK TALES (DISNEY).....	7.99	PIT FIGHTER.....	ULTIMATE GOLF.....	5.99
ENDLAND.....	4.99	POPEYE 2.....	UTOPIA.....	4.99
F29 RETALIATOR.....	9.99	POWERMONGER WW.....	WOLF 2.....	6.99
FIREHAWK.....	6.99	PREMIER MANAGER 2.....	WOLF 2.....	6.99
FIRST PRINCE & MEGALOMANIA.....	8.99	PREMIER MANAGER 2.....	WOLF 2.....	6.99
GAUNTLET 3.....	5.99	PLUS TRIVA.....	WAR IN THE GULF.....	5.99
GODFATHER.....	14.99	REACH FOR THE SKIES.....	WORLD RUGBY.....	5.99
HERO QUEST.....	4.99	ROBLOID.....	WORLD RUGBY.....	5.99
JIMMY WHITE.....	12.99	RUBICON.....	WORLD RUGBY.....	5.99
KING ACADEMY (READING, SPELLING,.....	15.99	SABRE TEAM.....	WORLD RUGBY.....	5.99
PATRIOT PUZZLES 4 & 8 YEARS.....	4.99	SHADOWWOLVES.....	WORLD RUGBY.....	5.99
REVENGE.....	4.99	SHOE PEOPLE (EARLY LEARNING.....	WORLD RUGBY.....	5.99
THE KING OF CHICAGO.....	4.99	SOFTWARE) 4 & 8 YEARS.....	WORLD RUGBY.....	5.99
THE LITTLE PUFF.....	8.99	SM CITY TERROR EDITOR.....	WORLD RUGBY.....	5.99
LIVERPOOL.....	8.99	SLEEPWALKER.....	WORLD RUGBY.....	5.99
		SORTING TRIANGLES.....	WORLD RUGBY.....	5.99
		STREETFIGHTER II (1 MEG).....	WORLD RUGBY.....	5.99

WIZARD SPECIAL ANY 3 FOR £10.00

PAST FOOD DIZZY, GUARDIAN, KIMIKO, SNOW GLO, MANK, MG 29, MINORNOOD, NISSECH, NITRO BOOST,

RESOLUTION 101, SEMOUR GOES TO HOLLYWOOD, SNOWASTRE, SUPERSTAR SEMOUR, TUSHER,

VENUS, FUTURE VOOODOO NIGHTMARE, GEMX, TOP BANANA ACTION SERVICE, OVERLANDER,

TWIN ON THE MOON, WICKED, WICKED, CHAMPIONSHIP RALLY, 187 AND 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

COMPILATIONS

ACTION MASTER	KID BACK
F16 COMBAT PILOT, WELLTRIS, TURBO OUTRUN, ITALIA 1990, DOUBLE DRAGON II.....	POSTMAN PAT, COUNT DUCKULA, THE MONSTERS.....
9.99	6.99
BIG BOSS	KIDS RULE OK
PURPLE SATURN DAY, TIN TIN ON THE MOON, KRYPTON CUBE, STR. CRAZY, CAPTAIN BLOOD, SAFARI GUNS, HOSTAGES, TEENAGE QUEEN, JUMPING JACKSON, BUBBLE +.....	POSTMAN PAT 3, POPEYE 2, SMOOT & SWEEP.....
9.99	9.99
BOARD GENIUS	MAX
CLIMBROCK, CARIBBEAN.....	TURBICAN II, ST DRAGON, SWP, NIGHT SHIFT.....
15.99	9.99
CARTOON COLLECTION	QUATRO ARCADE
TREASURE ISLAND DIZZY, CJ'S ELEPHANT ANTS, SLIGHTLY MAGIC, SPIKE IN TRANSILVANIA, SEMPUR GOES TO HOLLYWOOD.....	PO POWERBOAT, NITROBOAT, SAS COMBAT, PLUT TRM.....
9.99	3.99
COMPUTER LITS	QUATRO FIGHTERS
FLITTS, TRACKER, JOE BLADE, TAU CETI.....	SAS COMBAT, MG 19, KAMIKAZE, GUARDIAN ANGELS.....
5.99	4.99
ELIMINATOR	SPORTS COLLECTION
ELIMINATOR, STRIKE FORCE HARRIER, SHY CHASE, LANCASTER, SPOCK 2.....	PRO TENNIS, WORLD CUP SOCCER, RUN THE GAUNTLET.....
8.99	9.99
HIGH ENERGY	SUPER ALL STARS
NORTH & SOUTH, TIN TIN ON THE MOON, FIRE AND FORGET, TEENAGE QUEEN, HOSTAGES.....	MAGIC LAND DIZZY, CAPTAIN DYNAMO, ROBIN HOOD, LEGEND QUEST, IN C U, THE SAGA, THE SLUG.....
10.99	9.99
	THE GREATEST
	JIMMY WHITE, LURE OF THE TEMPTRESS, SHUTTLE.....
	19.99
	LOTUS TRILITTE
	LOTUS 1-2-3
	E14.99

GAMES SUBJECT TO AVAILABILITY. PLEASE NOTE - A PHONE CALL RESERVES YOUR ORDER. ORDERS UNDER £5.00 ADD 50P POSTAGE - PACKING, CHEQUES + POSTAL ORDERS MADE PAYABLE TO WIZARD GAMES. PLEASE ALLOW 7 DAYS FOR DELIVERY. OVERSEAS ORDERS PLEASE ADD £2.00 PER ITEM. ETC OR WORLD.

★ FREE ★ FREE ★ FREE ★

THE A-Z OF PUBLIC DOMAIN, LICENCEWARE & SHAREWARE RING, WRITE OF FAX FOR YOUR FREE COPY TODAY!

MT SOFTWARE (STR), GREENSVARD HOUSE, BROADWAY, TOTLAND, IOW PO39 0BX

TEL: 0983 756056 FAX: 0983 755800

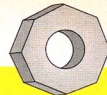
Yes, our new printed catalogue is available now **totally free of charge** - simply ring, write or fax and we will rush a copy to you in the next post!

For all the latest in PD plus incredible offers on commercial products such as EASY TEXT PROFESSIONAL, BEGINNERS GUIDE TO STOS, MR SMART'S BIG TIME, FAMILY ROOTS, etc. Order your copy today and join the 26,000 Atari customers who already use our service.

★ FREE ★ FREE ★ FREE ★

ADVERTISER'S INDEX

1ST COMPUTER CENTRE.....	51	LADBROKE COMPUTING.....	35
ANALOGIC COMPUTERS.....	12	MT SOFTWARE.....	83
CANNON FODDER.....	56	NEBULA SOFTWARE.....	49
DATAGEM LTD.....	27	OWL ASSOCIATES.....	65
ESP SOFTWARE.....	55	POWER COMPUTING.....	49
FAST ENGINEERING SERVICES.....	90	PREMIER MAIL ORDER.....	65
FES SHOW.....	62-63	THE INTERNET MAGAZINE.....	37, 39
FIVESTAR SOFTWARE LTD.....	IBC	TRADE IN POST.....	49, 65
FURST.....	83	TUMBLEVANE PDL.....	83
FUTURE MUSIC.....	45	ULTIMATE FUTURE GAMES.....	59, 61
GASTNER TECHNOLOGIES LTD.....	IPC-3	WE SERVE.....	71
INTERMEDIATES LTD.....	17	WIZARD GAMES.....	83



It's what you do with it

So what exactly do you do with the game you've just lovingly created? There are a number of ways to get your work seen by the world, whether you think your game is good, bad, or exactly the same as everyone else's. Always remember to credit the construction kit you've used – not doing so is a breach of copyright, and it's damned unsporting, too.

■ **Send it to a PD library.** Everybody loves PD, partly because it's free and partly because there are thousands of disks' worth of software available. If you're on your second or third game and you're happy with your results, you might want to consider the PD option. You're not asking anyone for money so you don't have to be 100 per cent confident that your game is the next best thing, but your work will be seen by enough people

who'll give you feedback and some gauge as to how well you're doing.

■ **Sell it as shareware.** If you feel a bit happier with your game than you expected, and you wouldn't mind seeing some financial reward for your efforts, shareware is always the best path to take. The beauty of shareware is that people see your work before they have to pay for it, giving them the opportunity to work out whether they like it or not. If you distribute the unregistered version via the PD network, you have an accurate measure of how well your game is received, simply by the number of people who order the full version.

■ **Sell it commercially.** This doesn't mean shops and shelves – you could sell your game by mail order from your home without losing

too much time from your day. This does require an amazing amount of confidence in what you've created, not only to take money from the public in return for your game but also to send the thing to *ST FORMAT* for a review to begin with (publicity being such an important thing).

■ **Find a user group.** One of the advantages of using a construction kit is that there are always going to be other people working along the same lines as you. For instance, the Third Dimension is a *3DCK* user group, spanning several formats but sticking solely to *3DCK*. You can always find help, advice, encouragement and tips from groups like these. *STF* will shortly be starting a small ad section, which will be the place to scan to find the user group for you.

STOS

Now here's a weird one. *STOS*, instead of being a formulated construction kit, is a mutation of *BASIC*, designed specifically for creating games. Unlike *GFA*, *STOS* casts aside all ties with existing languages, mimicking *BASIC* where appropriate and going its own way at other times. Unfortunately, *STOS* doesn't rely on things like the standard GEM interface, instead using its own routines which, unfortunately, aren't exactly up to the same standard.

Far be it from me to discourage anyone, but this is *STOS*' main failing. As an alternative to *BASIC* it would work well, but its search for originality and individuality means the quality of the final program suffers. You could use *STOS* to create a wonderful game – after all, it has more features than *MAGE* and *GFA* combined – but the final game would almost definitely suffer in terms of quality.

However, having pounded the package into the ground, it's only fair to say that although *STOS* has some serious shortcomings, it's also

the simplest to use if you're just starting out on the rocky road of game creation. If you're a hardened *BASIC* nut, however, you could be thrown off the trail quite heavily by the diversions *STOS* takes.

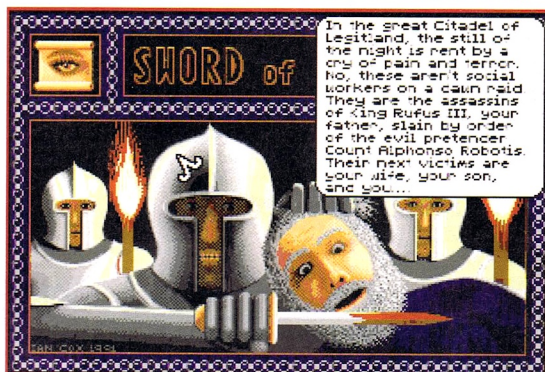
It would be hard to recommend *STOS* as the best option for game creation, but in comparison to *MAGE*, it has some serious advantages. It all comes down to the type of game you're looking to produce – if it's a simple, arcade style affair, *MAGE* would be your best option, but *STOS* is the only choice for anything more complex.

Design tips

■ Every tip in the *MAGE* section

Tailspin

Don't worry – I've never heard of this type of game either. It turns out that *Tailspin* is a utility for creating graphical adventures in the style of graphical walkthroughs, in which you click on areas of the screen to receive a text message, or an option box, or travel to a different location. For a better idea of exactly what it's all about, read issue 61's Indies Corner, in which *Sword of Kings* was reviewed (and



■ **Tailspin – enabling you to create games simple enough for the simplest of simple children to use. Young, impressionable children. With angry parents.**

hey! Turn to page 85 to order a back issue if you missed it).

In many ways, *Tailspin* looks to the totally mouse-orientated style of adventuring, the player needing to do nothing but point and click the whole time. Whether this is actually a Good Thing relies solely on the individual creating the game – they control the amount of freedom in movement, by deciding which areas of the screen are active.

One obvious disadvantage of this style of game is that the player will always be railroaded down a limited number of paths, because each option requires its own screen, which takes up masses of valuable disk space.

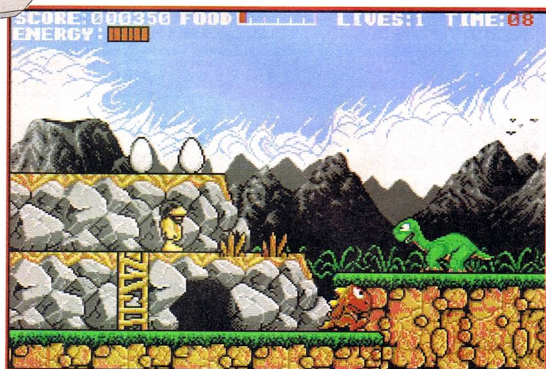
Having said that, *Tailspin* has to be the easiest route into game creation you can get, requiring no computer literacy to use at either

end. The possibilities are limitless. You don't have to make an adventure – you could create an art tutorial, an educational package, or anything else your heart desires. The package itself was on a Cover Disk not long ago – look at the 'Where to go' boxout and all will become clear.

Design tips

■ **Make sure your graphics are intelligible and distinctive.** You can't expect your player to click on something if they can't tell it from the rest of the scenery.

■ **Try not to railroad the player too much.** Don't be afraid of putting several 'developments' on one screen. The player will always prefer options over pretty pictures. After all, no one wants to watch a slide show. **stf**



■ **Prehistorik – a commercial title that proves what you can do with a little imagination and a helping hand. Who says constructed games are nob?**

Where to go

MAGE Game Creator

Majicsoft, 348 Meredith Sqr,
Columbia, SC29223 – ETBA
Shoot-'em-up Construction Kit
GBH = 0742 753423 – £9.99
ST Adventure Creator
Incentive = 0734 817288 – £49.95

ST Operating System

ST FORMAT issue 37 Cover Disk
(see page 85 if you missed it)
Tailspin
STF issue 40 Cover Disk (page 85)
3D Construction Kit
DataGEM = 071 608 0688 – £39.99

ST FORMAT

Back Issues



ISSUE 62

SEPTEMBER 1994

Disk: Medieval Chess, Fastcopy 3, Albion and TUC. **Inside:** Supercharge your ST special. Reviewed: Rainbow, Xenomorf 2, EZ-Art Pro, Imagecopy 3, Ishor 3, Nova card, Midgrid Pro, Rorke's Drift...



ISSUE 61

AUGUST 1994

Disk: Well 'Ard, Twinz, Digit 1.1 demo and Atari View 3.8. **Inside:** Serious software preview. Art packages rated. Reviewed: 3D Calc, Kobold, Diamond Back 3, HP Chrome 2.5.



ISSUE 60

JULY 1994

Disk: Snacman, DeskPic, Sam 2 Disk, Diskfree, AutoRAM, and Music Mon 2 demo. **Inside:** Next generation of ST games. WPs - sorted! Reviewed: Exposé, Vector Pro...



ISSUE 59

JUNE 1994

Disk: Snake-Ka-Mania 2; Videomaster; Morph. **Inside:** Video - how to edit and produce films; everything you need to know about DTP; reviews: POV 2; Tempest 2000.



ISSUE 58

MAY 1994

Disk: Quartet - full program and a Cannon Fodder demo. **Inside:** Piracy - your views; DIY monitor switcher; GDOs exposed; AVP previewed. Reviewed: DA's Picture, Gemini CR-ROM, Fontkit Plus, Outburst...



ISSUE 57

APRIL 1994

Disk: Demos of UVK v6.0 and Thought!, plus Tri Hell 2, Holocaust, Goal! Team Editor and Protect 6. **Inside:** Direct-to-disk recording and RAM upgrades. Reviewed: Chagall, Cannon Fodder and Breakthru 2.



ISSUE 56

MARCH 1994

Disk: FI demo, children's colouring book; plus five smart utilities. **Inside:** Over 100 ST tips; image processing and an in-depth look at Cubase Audio. Reviewed: Goal!, Raystart and Falcon Speed.



ISSUE 55

MARCH 1994

Disk: Frontier demo, Dungeon Master Editor, Stomp, Before Dawn and Audio Calculator. **Inside:** How your ST works, in-depth AtariWorks feature. Reviewed: Geneva, Rave, HiSoft Basic V2.1, Prism Paint 2...

SPECIAL OFFER!
£10 FOR THREE WITH FREE BINDER (WORTH £5.95)

CLASSIC ST FORMAT

Did you miss an old ST FORMAT? Is there a Cover Disk you need? Take advantage of our brilliant back issues

offer and get three STFs and a binder to store them in for just £10! Just tick the issue number(s) you want on the order form (right). Go on, get yourself a piece of ST history.

£4 EACH

Name
Address
Postcode Telephone
Method of payment - please tick appropriate box
☐ Access ☐ Visa ☐ Cheque ☐ PO
Credit card number
Expiry date
OR CALL 0225 822511

Please send me the following back issues at £4 each or three for £10 with FREE binder:

☐ 19	☐ 20	☐ 21	☐ 22	☐ 23	☐ 24	☐ 25
☐ 26	☐ 27	☐ 28	☐ 32	☐ 35	☐ 36	☐ 37
☐ 38	☐ 40	☐ 41	☐ 42	☐ 43	☐ 44	☐ 45
☐ 46	☐ 47	☐ 48	☐ 49	☐ 50	☐ 51	☐ 52
☐ 53	☐ 54	☐ 55	☐ 56	☐ 57	☐ 58	☐ 59

Please make all cheques payable to Future Publishing Limited. Customers outside the UK please add £4 for overseas delivery. SEND THIS FORM TO: ST FORMAT Back Issues, Future Publishing, FREEPOST, (BS4900), Somerton, Somerset, TA11 6BR. You don't even need a stamp if you post it in the UK! Please tick here if you do not wish to receive direct mail from other companies ☐

FEEDBACK

ST FORMAT
OCT
1994

'The mail must get through!' Unfortunately, what your mail has to try and get through to is Trenton Webb. Good luck, you'll need it!

Maxwell House?

Dear Editor
A little story
ACT ONE
Once upon a time a man called Mr R Maxwell saw that his paper wasn't selling well and said, "I know, we'll pretend to have

a bingo game with a £1 million as the first prize, but we won't lose any money because I'll rig the game so that no one wins."

ACT TWO

Mr Maxwell is now dead but his spirit lives on! ST FORMAT decides

to run a competition on the back page of issue 61, but in the true spirit of Maxwell the

crafty beggars miss off the top lines of the grid! I've done quite well, finding 15 countries in full. I've also found four inter-

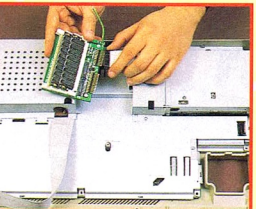
esting ones - Switzerland, Morocco, Bulgaria and Rmany.
No doubt you will send the winner only part of the first prize!
David Halzelden, Winchester
stf: Picture the scene. Clive finds whizzy little Word Quiz utility. We like it. We think, "This'll be fun, we'll try to spread a little joy and happiness in the world." WRONG. All we manage to start is a nightmare of nightmarish proportions. As this was the last page to go to the printers, we were a little rushed and failed to spot that seven lines were 'chopped'. Apologies to all concerned. Our motives were pure. We wanted to make people happy. Now we've learned our lesson. As a direct result of this débâcle, enjoyment, fun and sundry light-hearted anecdotes have

all now been officially banned from the pages of ST FORMAT.

An annoying footnote to this sorry tale is that just a few days after we discovered the FM/blitter problem with Word Quiz 4, our Group Publisher returned our only blitterless FM to us after a four year loan. Grrrr!

Memory for nothing

Dear ST FORMAT
I recently upgraded my STE and subsequently I have a megabyte of SIMMs sitting on my shelf longing



■ Rmany? Have you never heard of Rmany? Where do you think the Rmans come from?

■ These can be yours! To bag a couple of SIMMs for absolutely nowt just send us a postcard!

E Y C A M D L M O E O S L B R I I U I H
T D L N K R N L W W M L Y S I C E G A S
S N O C I M N T E H T G E B E T I I S Y
E A M E A B E W O E E A S G S A I I S F
A L E N R D C X S T I Y N I Q O P L M Y
D E K A X S O G I W R B P Z L R E G E P
N R Z I O G R E E C E K S E N O S L L A
A I C R S Z E B O R O D D E A C A O Y O
L F C A M E R O O N M I E I B C A L H E
R O A G H A E M E L U A R N A O D L G M
E P R L E R A H G S I E N E E R O V S
Z E O U E G N T A B G V D Y L O A J M A
T R Y B R E A E A I L A I N A M O R I A
I T A L Y N C R N S E I I A A I O E A A
W R A I I T A Y F A B B Y S H L U E E E
S E N A C I L R A G J M O E S D L O P L
R S P E D N C M E W E O E J R U A O Q R
T S E U G A A L I R L O V E U R E H R
W G A A S S O U T H K O R E A E Y E R S
U S E N F J S L I D O C N H R Y L T Z J

LA LAW ("I KNOW MY RIGHTS")

PDQ

Dear Feedback
Please can you help me? I am trying to start a PD library for ST owners (who else?) and I am having great difficulty in finding out if there are any legal problems involved in supplying the following to customers:

- Normal public domain software
- Shareware software
- Second-hand commercial software

If you cannot help me yourselves, could you please print the addresses of the people who can - I would be very grateful.

Keith Hunnybun,
Isle Of Wight

stf: With public domain and shareware the author must explicitly state that they have chosen not to enforce their copyright, then the program can be freely copied by libraries and com-

puter users. It is not safe to assume that anything is PD, and you should always check

The shareware angle is bit of a grey area because you can only enforce a voluntary payment with a little moral blackmail or the option of updates. The trouble with this kind of software lies in getting absolute proof that the original author has waived their copyright. Naturally if an original program is sent to you it is possible

■ Even though authors get the rights to their games back when companies fold we still can't get the games on our Disk.



to check personally but if the program is a third or fourth generation copy or, even worse, comes from overseas, then thorough checking is almost impossible and very time-consuming.

As for the resale of commercial software, I'm afraid I'm going to duck out of that one. The people who would know are FAST (Federation Against Software Theft). You can write to them at: FAST, 2 Lake End Court, Taplow, Maidenhead, Berkshire, SL6 0JQ. Failing that, check out the Copyright Design and Patent Act 1988. Ask nicely at your local library and they should be able to get hold of a copy for you.

Ooops, wrong name

Dear Ms Richards
I have been following the piracy debate with great interest and I am one of the few people out

there who do not own any pirated software. My question is: what happens to the copyright of software when the company hits the wall, such as Mirrorsoft or Hewson? The reason I ask is because quite recently I've seen a large PD library based in Scotland selling the complete texts to out-of-copyright novels such as HG Wells' War Of The Worlds and Dr Jekyll And Mr Hyde. If this is within the law, why can't we have some of the old games on the Cover Disk?

Ijaz Hussain,
Birmingham

stf: Eh, it's you from the letter over there! Copyright is a weird and wonderful thing. In the case of novels copyright lasts until an author's death and then runs for 50 years, which is how Peter Pan funded the Great Ormond Street Hospital - amateur dramatic groups had to fork out each time they used the name Wendy. In the case of software it is exactly the same: the copyright is

for a new home. Is there anyone out there with a half-megabyte STE who would like a pair of 250K SIMMs for free, gratis and for nothing? If so, send me a padded envelope complete with stamp and return address and the first two envelopes through the portals of my abode will get 'em.

Mark Thistlewaite, Sheffield

stf: Do you know how many padded envelopes you're going to get? Nah, I think the easiest solution is if anybody who wants the SIMMs jots down their name, address and machine type on a postcard and sends it in to us. The first two through the door will be forwarded – along with free 'limited edition' ST FORMAT padded envelope because we're soooo generous – to Mark. Send your SIMMs plea to 'Free Gratis Nothing', ST FORMAT, 30 Monmouth Street, Bath, Avon, BA1 2BW.

Confused? You will be!



The Editor

1) Can there be life after STOS?
2) Now that STOS is no longer being produced, and ST FORMAT has no more STOS collections to offer, is the language dead? And are STOS manuals still going to be available?
3) Is it possible that STOS will now find its way into the public domain as shareware?
4) Is there an alternative – and similar – language available for those of us who had planned to buy STOS but are now thwarted and



■ More than a programming language, more a way of life!

bereft? Will there be something to cater for the interest that will be generated by the continued publication of STOS Corner?

5) Will STOS Corner – and STOS support – now be discontinued by ST FORMAT?

6) Is the copyright on STOS still alive and well? Will Mandarin Software still pounce heavily upon anyone making illegal copies of programs or manuals? This could be prevented by the production of more legal copies – or even a successor to STOS!

stf: 1) Erm, yes, life will continue. It is after all only a programming language. There's always football, powerful motorcycles...

2) You can get hold of STOS by ordering STF 37 – it's on the Cover Disk (see page 85). Manuals are available in bookshops.

3) No. Commercial programs VERY rarely enter the public domain. The

copyright on software runs for 50 years and most authors and publishers choose to exercise this right to the full.

4) Turn instantly Simon's rather splendid feature on page 14.

5) As STOS Corner (part of ST Answers) is a question and answer feature it's up to you. STOS Corner is safe as long as STOS users keep writing in with STOS questions.

6) It's unlikely that Mandarin (sic) would get heavy themselves, when they could always call on their big and dead hard mates at FAST (Federation Against Software Theft) to give anyone they caught a right legal kicking.

Shareware corruption



Dear Mr Webb

Due to some unfortunate circumstances beyond my control a few customers of the Ultimate Cheaters Guide Database v.1 may have received a copy with a corrupted ULTIMAT2.DAT data file. This problem was caused by a corrupted master disk and has now been solved.

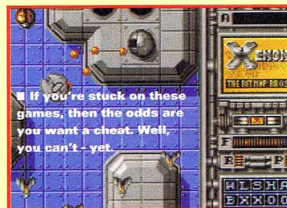
To check if you have a corrupted copy do a search on a game towards the end of the alphabet such as Z-Out or Xenon. If the disk is corrupted then a 'No match' message will be returned. If you find you have a faulty copy please return it in a padded envelope to: Jazzbox Inc, Well Croft Hope House, 165 Ash Road, Salfrey, Birmingham, B8 1DR. Mark the envelope 'Returns' and a replacement will be sent free of charge.

For all overseas enquires, to obtain UCGD send a cheque payable on a British bank or an international money order for £6 sterling to the address above, made payable Ijaz Hussain.

Ijaz Hussain, Birmingham

stf: Cheers. Well you know what to do if you were unlucky enough to get a corrupted disk.

You wot?



ST FORMAT

Was it the final fling of a departing editor or did you really send £25 to JC of Kent. It is your money but did you have to waste valuable space in the magazine with such

complete and utter rubbish?

I would like to appeal for less humour when it takes precedence over the facts. In Steve Parker's article, Protect Yourself, I learned that I could not hide a file in a box under the bed, but I didn't actually discover how I could hide a file.

My main purpose in writing to you is to ask if you could print the issue number on the Subscribers' Wonder Disk and on the newsletter – this would greatly help in filing both.

Peter Jennings, Swansea

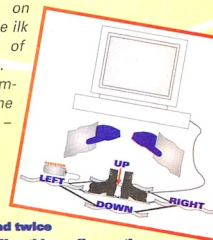
stf: Paula's final fling was a storming first half of STF 60 (all the really good bits). The letter in question was actually real – believe it or not – and we featured it because we were as 'impressed' by its avant-garde technical humour as you obviously were.

As for the precedence of humour over fact, you are quite right. Our mission (cue corporate-speak) is to inform and entertain – in that order. Clive (Steve's evil twin brother) was merely trying to lighten a serious topic. If this obscured the basic facts then it was, as you point out, an error. However as you'll have read elsewhere in Feedback there is now a complete ban on humour and the ilk in the pages of STF. Er, maybe.

As for numbers on the Wonder Disk – job done. Hurrah, etc!

■ As mad as a small village in

Hampshire and twice as breezy! Was this really worth £267 Erm, yes actually.



20 questions – well almost

Dear Feedback
1) Since the Jaguar CD-ROM is now being developed, wouldn't it be good if Atari made another CD-ROM for the Falcon/ST (based on the Jaguar CD-ROM technology)?

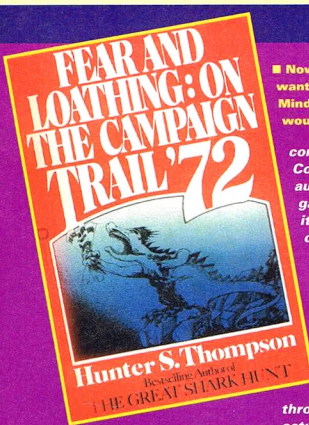
2) I have read that Commodore was founded by Jack Tramiel. Didn't he make Atari as well? If he did, why make Atari if he already had Commodore?

3) Is TOS 32-bit?

4) What do the F, M and E on the ST mean?

5) If Atari want people to buy the Jag why don't they make an offer. For example, buy a Jaguar and get £50 off the price of a Jaguar 2 when it comes out. I know the Jaguar is cheap already but it would be better to sell a Jag cheaper than not sell one at all.

Hans Sharma, Haninge



■ Now this is the sort of thing I want to see on the Cover Disk! Mind you an interactive adventure would be even better!

commercial games on their Cover Disk. So even if an author wanted to put an old game on the Cover Disk, once it's been published commercially we can't touch it.

The book texts are a neat idea but we couldn't use them because such text-files would consume huge wads of space on the disk. On top of this our problem would be choosing the texts – we could use everything from Chaucer through Shakespeare up to... actually I can't think of an author who died in 1944, but how about George Orwell in the year 2000? But what would you want? Personally I'd be in for some Jack London, Thomas Wolfe or even Hunter S Thompson (even if he's not clinically dead yet).

retained by the author for 50 years after their death. However the author can assign the rights to a publisher. If that company then ceases to exist the full rights revert to the author.

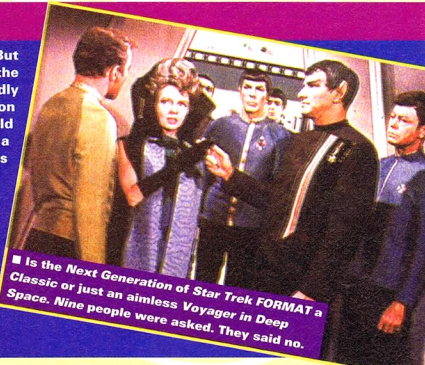
There is however a ban on computer magazines putting full

The NeXT Generation

Star Trek. I'm a fan. You're all obviously fans. But tell me - why is **ST FORMAT** rapidly becoming the **Official Trek Handbook**. It seems you can hardly review a TOS upgrade without featuring a Klingon or two. Now I'm not complaining here, but could you perhaps try to remember that ST stands for a brand of computer as well as for Mr Rodenberry's imaginary universe!

Sean Park, Cumbria

stf: Of course. We'd never forget that we're about STs! Look I'll prove it: ST stands for Sixteen Trek... or was it Star Thirty-two... The Next Generation, or something like that. Okay I admit it. From now on Star Trek, like humour, fun and enjoyment, has been completely banished from **ST FORMAT**. By order. Make it so.



■ Is the Next Generation of Star Trek **FORMAT** a Classic or just an aimless *Voyager in Deep Space*. Nine people were asked. They said no.

I know there are problems with battery life but computing on the move is not what I'm after. Alternatively is there an emulator available for laptop PC?

Steve Wollington, Basildon

stf: Every now and again a few STACys turn up but these tend to sell so fast they make hot cakes look cold. You'll also find a few for sale in magazines like *Micro Mart* and *Exchange And Mart* (for our full list of hints and tips on this see our feature, *A Classified Bargain*, in **STF** 62). As for PC-based ST emulators, look at the *Gemulator* review on page 48.

stf: 1) CD-ROM isn't really that difficult a technology to master and there are already CD-ROM drives which are perfectly compatible with the ST. And the one that drives the Jag won't be radically different to any other - still storing data to be scanned by laser - so the benefits of the technology wouldn't reveal themselves.

2) Yes, but it wasn't his company. After a corporate fall out Jack 'left' Commodore and started with Atari. A clue to his opinion on the

■ On the road! A solid book but a truly dreadful TV show. But would a **STACY** laptop have saved the day?

situation can be found in the name of his new company. Atari describes the penultimate move in *Go* when you've managed to get your opposing player one step from defeat. Now whatever could he have been thinking of?

3) No, TOS is 16-bit.

4) The original ST lacked either an internal floppy drive or TV modulator and was called the ST.

The STF featured an internal floppy drive and the STM featured a built-in modulator, hence the F and M suffixes. The STFM featured both these extras (no, really). In the case of the STE, the E stands for enhanced.

5) It wouldn't really be a smart marketing move to remind people they are buying a system that will be

■ It may look like a toilet but this is the Jaguar's big chance. But why isn't there an ST version of the CD-ROM?



superseded. Anyway what's all this about the Jaguar 2 - what do you know that we don't?

STACY on tour

Dear Sir,
My problem is this: as a freelance technician in the entertainment business I am constantly on the move and carting around all my ST hardware can be a bit of a problem. Are there any Atari-compatible laptops available. I know that the STACY was discontinued some time ago but are there no stocks lying around in a warehouse somewhere gathering dust?

Oh no! PD!

Dear Sir
As the new editor of **ST FORMAT** do you have any plans to increase the PD coverage?

Peter Kerr, Strathclyde

stf: With the fun and games we've had over the last few months I think you'd understand my reluctance to cover any PD whatsoever. Naturally we will still feature the very best PD software as we always have. However expect a shake-up in the mag's PD coverage in the next few months. **stf**

Feedback October 1994 © **STF**. Copyright will be retained for 50 years after the author's death - an event you can hurry along by writing in with your opinions, points of view, rants, raves, observations or questions on all matters ST. Send your letters or postcards to: Feedback, **ST FORMAT**, 30 Monmouth Street, Bath, Avon, BA1 2BW. "Say good night Dick." "Good night Dick."



ST FORMAT'S GUIDE TO BUYING BY MAIL ORDER



The need for buying by mail order increases as high street shops

with **ST** peripherals get scarcer. Heed our advice.

1. Before you send any money, ring the supplier to make sure the item you require is in stock. Ask questions about the company's policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packaging. Find out when you can realistically expect to receive your goods.

2. Make sure you always, always, always read the small print on adverts.

3. Beware of companies that do not include their address on their adverts. Also, avoid any companies that do not answer or return your calls.

4. By far the best method of payment is by credit card. If you're ordering goods which come to more than £100 in total value, remember that you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company's policy. You can also try to get extra insurance in advance.

5. If you're not paying by credit card, pay by cheque. Never send cash, and avoid using postal orders.

6. Always keep a record, and keep it somewhere safe. If you are buying by credit card keep a note of the time of the order and ask for an order number. When ordering anything

over the telephone, always double-check the price before you part with your money.

7. If you are sending a cheque keep a note of the cheque number, the date and the exact value. Make sure you know the name and some details of the mail order company.

8. When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.

9. Always order from the most recent issue of **ST FORMAT**.

10. If a problem does arise, contact the supplier in the first instance. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings that can easily be resolved. If you think you have a genuine grievance, contact your local Trading Standards Officer. The number is in the phone book.

ST FORMAT

Reader offers

Go on, treat your ST to some of these amazing STF bargains.

THE BEST OF ST FORMAT

FUTURE PUBLISHING

Features, beginners' guides, huge jargon busters section, techie tips and reviews - plus optional disks. It's great!

DESCRIPTION: THE BEST OF STF WITH TWO DISKS

STF PRICE: WAS £15.40 NOW £9.99

ORDER No: ST BOOK D

SAVE £5
£9.99



FRONTIER: ELITE 2

GAMETEK

Join the hordes of people who have already experienced the joys of wandering around space, doing absolutely anything you fancy while you're there - the choice is yours. All you need do is order Frontier: Elite 2.

DESCRIPTION: FRONTIER

RRP: £29.99

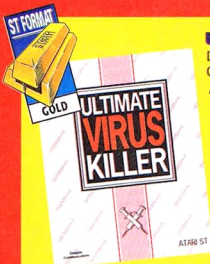
STF PRICE: £25.99

ORDER NO: STFFRO

STAR BUY

£25.99

STF RATING 91%



UVK v6

DOUGLAS COMMUNICATIONS

A beautifully updated and easy-to-use version of this comprehensive virus killer, which can repair over 700 commercial titles and identify over 1,500 boot sectors.

DESCRIPTION: ULTIMATE VIRUS KILLER V6

RRP: £12.95

STF PRICE: £9.95

ORDER NO: STFUVK

SAVE £3

£9.95

STF RATING 92%

ST FORMAT BINDER

TWO FOR £9.99

ST FORMAT

Keep your prized collection of the world's most exquisite, comprehensive ST magazine safe from spills and stains in this quality binder.

DESCRIPTION: ONE BINDER

STF PRICE: £5.95

ORDER NO: ST112

DESCRIPTION: TWO BINDERS

STF PRICE: £9.99

ORDER NO: ST1122

£5.95



ROCK 'N' ROLL CLAMS

CASPIAN

A rollicking rumping platformer puzzler. It's got style, gameplay and great music.

DESCRIPTION:

ROCK 'N' ROLL CLAMS

STF PRICE: £12.95

ORDER NO: STRRC



£12.95

The FES is the year's premier computing event: ● See the future ● Try the latest hardware ● Watch the latest software in action ● Pick up brilliant bargains ● See the new machines ● Meet the ST FORMAT team (!?) ● and much, much more. And if you order your FES ticket along with a mail order purchase you can SAVE £1 per ticket (only £6 each!).

DESCRIPTION: FES TICKET

STF PRICE: £6

ORDER No: STFES

For ticket sales and more information about yet more splendid FES offers (group tickets, door prices etc) call ☎ 0369 4235.

The Future Entertainment Show
Earls Court 2
26th - 30th October 1994
CD-ROMs: Amiga © Mac © PC © CD-i © Commodore

ST FORMAT READER OFFERS

Name _____
Address _____
Postcode _____
Telephone _____

Don't forget you can save money when you order your Future Entertainment Show tickets with your Reader Offer purchase

Description	Order no	Price

TOTAL ORDER

Method of payment - please tick appropriate box

☐ Access ☐ Visa ☐ Cheque ☐ PO

Credit card number / /

Expiry date /

Please make all cheques payable to Future Publishing Limited.

Customers outside the UK please add £4 for overseas delivery

SEND THIS FORM TO: ST FORMAT Mail Order, Future Publishing, FREEPOST, (BS4900)

Somerton, Somerset, TA11 6BR. **You don't even need a stamp if you post it in the UK!**

Please tick here if you do not wish to receive direct mail from other companies ☐

■ If you wish to order by credit card or have any queries, all you have to do is ring the Hotline on...

☎ 0225 822511

■ Customer Services can be contacted on ☎ 0225 822510

STF10/94

TWILIGHT ZONE

Shed a tear as another issue of *STF* goes south. We're having a little party at the minute, so have a read of this lot till we come back next month.

PIXEL PAINTING

Kevin Millar of Glasgow is this month's winner of £25, for his work with *Canvas*. The distinctive style Kevin uses is achieved by first working on an outline in 'mirror' mode, then selecting an appropriate palette and adding the colour. Nestling in amongst his work we found the three pictures you can see here – Arthur, Bored and the cryptically titled New.

To win £25 for a bit of doodling with an art package, send your pictures to Pixel Painting, *ST FORMAT*, Future Publishing, 30 Monmouth Street, Bath, Avon, BA1 2BW.



■ Now this is most definitely the kind of thing that wins. Not only has our Kevvy-babes implemented an effective drawing technique with skill, but he also managed to scare the willies out of the *STF* team.



NEXT MONTH

That's a good question – what exactly is in next month's *STF*?

Well, the run up to Christmas begins with the first in a series of extra things stuck to the mag – we'll be starting by putting two disks on the cover next month. We'll be giving you some of the best PD you've ever seen, as well as, hopefully, a *DA Vector Pro* demo, one of the most useful utilities you're ever likely to use.

We'll be covering the latest developments in *ST* hardware,

from new drives to a brand new machine – Medusa was mentioned briefly in this month's News, and next month we'll be finding out exactly what it is, what it does, how well it does it and whether anyone's got three grand to spare.

If that isn't enough, we'll have the usual blend of news, reviews, interviews, techie views and featurous (damn). We'll be there on October 11, waiting for you to pick us up off the shelf, waltz grandly to the checkout and say, "I'll take this fine periodical please." Will you?

COMPO WINNERS

Yup, it's time to give stuff away. This month, we're drawing *STF* 61's entries to both the FES tickets compo and the TOS switcher compo.

First up, the FES ticket compo (wonderful bash, 26-30 October = 0369 4235 for tickets). Our ten ticket winners are: R Prior of Tottenham, David Sambrook of Manchester, Simon Billingsley of Nottingham, Andrew Axton of Cheltenham, Daniel White of Gwynedd, Chris Anderson of Box, R Ryder of

Galashiels, Chris Downs of Bath, William Harper of Co Derry, and Nick Smith of Glasgow. The correct answer was, indeed, Richard Monteiro. Late tickets will be awarded to anyone who can tell us what the question was.

What does TOS stand for? If you guessed either The Operating System or Tramiel Operating System, you were right. If you're D Cowan of Glasgow or D Croft Yorkshire, you've got a new TOS switcher. Hurrah!

A reader we really can't please

Life's difficult on *ST FORMAT*, you know. When we're not trying to make everything we do compatible with every *ST* on the market, we're making sure Cover Disks work, numbers are right, and facts check out. Occasionally though, we come across a reader we really can't help:

"Concerning Cover Disk 59 *ST Format*. I bought the June issue 59 of *ST Format* with the Cover Disk and it doesn't seem to be working. I was wondering if you could exchange it for one that is work-

ing, or could you tell me why it doesn't seem to be working on my Amiga 600."

We decided to drop the name from the letter to save any unnecessary (extra) embarrassment, but we thought we ought to let the author know – you're reading the wrong magazine. You might find *Amiga Format* (our truly excellent sister magazine) a good read, but nothing you find in this magazine will be compatible with your Amiga. It's a confusing world we live in, to be sure. **stf**

FAST ATARI REPAIRS

FOR QUICK QUALITY WORK DONE AT COMPETITIVE PRICES

Upgrades + Engineering requirements

★ **NORMAL SERVICE**
£24.99 + parts
Free Quote

★ **GUARANTEED SAME DAY SERVICE**
+£10.00
computers received by 12.00 mid-day

also Monitors repaired

Door to door pick up + delivery anywhere in the U.K.
or see us at our workshop in Central London

Central London

FAST COMPUTER SERVICES

144, Tanner St., Tower Bridge, London SE1 2HG

Tel. 071-252 3553

We reserve the right to refuse any machine

Low Cost Upgrading

STE to 1Mb	£10.99
STE to 2Mb	£49.99
STFM to 1Mb	£39.99
STFM to 2.5Mb	£79.99
TOS 1.4	£25.00
TOS 2.06	£70.00
Double Sided Drive	£47.00
Power Supply	£39.95

Exchange Service

Power Supply	£24.99
Disk Drives	£25.50
Keyboards	£25.50

Fitting for the above £15.00

A division of
SOFTWARE PLUS
 Britain's largest independent
 specialist retailer of
 computer games.

SOFTWARE FIRST

Established
1981

ATARI ST

3D Pool	£8.99	Jungle Jim	£2.99	Their Finest Missions	£9.99
Addams Family	£8.99	Kingmaker	£23.99	Their Finest Hour	£14.99
Air Support	£9.99	Kings Quest 4	£14.99	Thunderjaws	£4.99
Alien Storm	£19.99	Legend	£2.99	Transarctica	£9.99
American Ice Hockey	£1.99	Leisure Suit Larry 1	£11.99	Trivia Game Show	£2.99
Another World (1 Meg)	£11.99	Leisure Suit Larry 2	£11.99	Winter Gold	£12.99
B17 Flying Fortress	£24.99	Lotus 2	£8.99		
Batman Returns	£17.99	Lure of the Temptress	£11.99		
Blitzkrieg	£2.99	Magic Pockets	£4.99		
Blue Max	£4.99	Manhunter New York	£12.99		
Campaign	£23.99	Manhunter San Francisco	£12.99		
Cannon Fodder	£19.99	McDonaldland	£7.99		
Captain Planet	£4.99	Mickey's Runaway Zoo	£4.99		
Championship Manager '94 DD	£8.99	Microprose Grand Prix	£24.99		
Champ Manager End of Season	£12.99	Nigel Mansell World Championship	£12.99		
Championship Manager Italia	£17.99	Offshore Warrior	£2.99		
Chaos Engine	£17.99	Pacland	£4.99		
Chariots of Wrath	£2.99	Pacmania	£4.99		
Civilization	£24.99	Parasol Stars	£8.99		
Cohort	£2.99	Patrician	£21.99		
Colonels Bequest	£12.99	Pinball Magic	£8.99		
Crime Does Not Pay	£2.99	Police Quest 1	£12.99		
Cybercon 3	£10.99	Police Quest 2	£12.99		
Cybercop	£2.99	Powermonger & WW1	£12.99		
D Day	£21.99	Prehistorik	£4.99		
D Generation	£7.99	Premier Manager 2	£17.99		
Dark Century	£2.99	Prince of Persia	£6.99		
European Football Champions	£10.99	Reach for the Skies	£14.99		
F29	£10.99	Realms	£10.99		
Falcon	£8.99	Ringside	£2.99		
Fast Food	£2.99	Robinsons Requiem *	£21.99		
FC Manager	£2.99	Robocop 3	£9.99		
Fiendish Freddy	£3.99	Scrabble	£19.99		
Fire and Forget	£2.99	Secret of Monkey Island (1 Meg)	£12.99		
Fire and Forget 2	£2.99	Sensible Soccer Intl Edition	£15.99		
Frontier Elite 2	£19.99	Sim City and Populous	£20.99		
Galactic Conqueror	£2.99	Skyhigh Stuntman	£2.99		
Games	£11.99	Sliders	£4.99		
Genesis *	£19.99	Space Crusade	£8.99		
Goal	£17.99	Space Quest 2	£11.99		
Goofy's Runaway Express	£4.99	Space Quest 3	£14.99		
Graham Gooch World Class Cricket	£12.99	Speedball 2	£8.99		
Hoyle Book of Games Vol 1	£11.99	Street Fighter 2 (1 Meg)	£11.99		
Hoyle Book of Games Vol 2	£11.99	Striker No.9	£3.99		
Indiana Jones Fate of Atlantis Action	£8.99	Super League Soccer	£2.99		
International Athletics	£2.99	Super Space Invaders	£8.99		
International Rugby Challenge	£20.99	Tactical Manager	£17.99		
Ishar 3	£21.99	Tee Off	£2.99		
		Tennis Cup 2	£8.99		

ACCESSORIES

Cheetah Bug	£11.99
Logic 3 Delta Ray	£14.99
Logic 3 Quattro	£9.99
Quickjoy Jetfighter	£11.99
Quickshot Maverick 1	£11.99
Quickshot Python	£9.99
Speedking Autofire	£11.99
Zipstick Super Pro	£12.99
Logic 3 Freewheel Digital	£19.99
Speedmouse Logic 3	£12.99
3.5" Disk Box holds 40	£4.99
3.5" Disk Box holds 80	£6.99
Unbranded 3.5" blank disks x 10	£5.99
Mouse Mat	£1.99
Lightwave Joystick Extension Lead	£7.99
Lightwave Joystick Splitter	£7.99
Lightwave Co Axial Plug	£2.99

EDUTAINMENT

ADI English 13 - 14	£21.99
ADI English 14 - 15	£21.99
ADI French 11 - 12	£21.99
ADI French 12 - 13	£21.99
ADI French 13 - 14	£21.99
ADI French 14 - 15	£21.99
ADI Maths 13 - 14	£21.99
Fun School 2 under 6 years	£6.99
Fun School 2 6 - 8 years	£6.99
Fun School 2 over 8 years	£6.99
Fun School 4 under 5 years	£20.99
Fun School 4 5 - 7 years	£20.99
Fun School 4 7 - 11 years	£20.99

BUSINESS SOFTWARE

First Word Plus	£129.99
Home Accounts	£29.99
Home Accounts 2	£54.99
Protex V4.3	£49.99
Timeworks 2 DTP	£129.99

Tel: 0268 725500
Fax: 0268 590076

Telephone Orders:

10am-7pm Mon - Fri, 10am-4pm Sat - Sun. Answering Service at all other times

Callers by appointment only. All prices include VAT & Postage for UK Mainland. Add £2.00 to postage price for Europe and £3.00 for rest of the world. Next day service available £3.70. Please send Cheques/PO's payable to:

SOFTWARE FIRST, 8 BUCKWINS SQUARE, BASILDON, ESSEX SS13 1BJ.

Please allow sufficient time for cheque clearance. Credit cards are not charged until day of despatch.

Please state make and model of computer when ordering.

If you can't see what you want please call, new stock arrives daily.

Some titles may not be released at time of going to press. We supply only official UK product. Formats supported include Amiga, PC, ST, Master System, Megadrive and Game Gear. All prices subject to change without notice. All items subject to availability. &O/E.

Name	
Address	
Postcode	Telephone
ITEM	PRICE
ITEM	PRICE
ITEM	PRICE
POSTAGE	
TOTAL	
I enclose a cheque/PO made payable to Software First or please debit my Access/Visa:	
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
Expiry Date: ☐ ☐ ☐	ST10
Signature	

On this month's...

**ST
FORMAT**

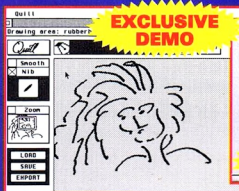
**GUARANTEE
OF QUALITY**
You won't find a better Cover Disk
on any ST magazine. That's why
ST FORMAT outsells all competitors

COVER DISK

Wow! 9 brilliant programs!

QUILL

Do the write thing
with this brilliant
demo of CGS'
calligraphy pack.



H.E.R.O.

Are you a hero or
zero? Find out with
this Flashback-style
platform star.

HERMAN

Good Boulderdash
clone shocker!
Catch grey-monkey
fever, play Herman.



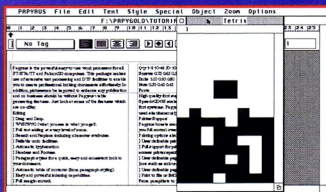
DYNAMIC ADDRESS DATABASE

Satisfies all your
dynamic address
database needs!
Good ol' DAD!



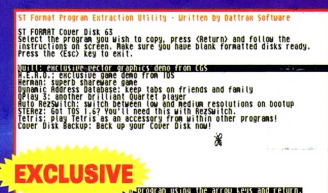
TETRIS

The classic
Russian shape
dropper as a
Desk Accessory. Smart!



MENU

Unpacks your
Cover Disk
files as quick
as a click!



PLUS! PLUS! PLUS!

QPLAY 3

Easy-to-use
Quartet player
with voice-set
text display too!

AUTO REZSWITCH

Avoid preference
menus with ARS.

BACKUP

Ensure your
Cover Disk stays
safe. Backup
that data NOW!

STE MED REZ

Yes! Boot your TOS
1.6 STE in Medium
Resolution. Needs
Auto Rezswitch.